

LPC# 1030205150
DIXON GROUNDWATER STUDY
LEE COUNTY
DIXON, ILLINOIS
ILD 000 509 239
SUPERFUND/HRS

US EPA RECORDS CENTER REGION 5



483589

CERCLA

Combined Assessment Report



**CERCLA
COMBINED ASSESSMENT**

For:

**Dixon Groundwater
ILN 000 509 239
LPC# 1030205150
Dixon, Illinois**

**PREPARED BY:
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF LAND
DIVISION OF REMEDIATION MANAGEMENT
OFFICE OF SITE EVALUATION**

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1.0 Introduction

On September 24, 2004, the Illinois Environmental Protection Agency's (Illinois EPA) Office of Site Evaluation was tasked by United States Environmental Protections Agency (US EPA) Region V to conduct an Combined Assessment (CA) for the Dixon Groundwater Site in Dixon, Illinois. The CA is performed under the authority of the Comprehensive Environmental response, Compensation and Liability Act (CERCLA) commonly known as Superfund.

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR Part 300) requires a Preliminary Assessment (PA) be performed on all sites entered into the Comprehensive Environmental Response, Compensation, and Liability System (CERCLIS). Following the PA, if considered necessary, a Site Inspection (SI) is conducted. However, if site conditions warrant, the PA and the SI may be conducted concurrently as a Combined Assessment. The CA integrates PA/SI activities typically performed during the PA (information gathering, site reconnaissance) with activities typically performed during the SI (review of data, development of field work plans, field sampling, filling data gaps) to achieve one continuous site investigation. The CA is intended to:

- 1) Eliminate from consideration those sites that pose not threat to public health or the environment;
- 2) Determine the potential need for a removal action;
- 3) Set priorities for future investigations; and
- 4) Gather existing or additional data to facilitate later components of the site assessment process.

Based on the results of the CA, if the determination is made that the site is NPL caliber, additional data will likely be needed to complete the assessment. A

sampling plan to accommodate removal and site assessment needs, as well as initial remedial needs will be developed. The need for site sampling will be based on a reasonable understanding of the site in order to assure that adequate data will be collected for the removal assessment and the preparation of the Hazard Ranking System (HRS) score. The need for the initial sampling for the remedial investigation will also be considered. Upon completion of the data gathering, there will be a determination of whether the site should be forwarded within the Superfund process, either through the remedial or removal programs. Based on the preliminary HRS score and removal program information, the site will then either be designated as No Further Action (NFA), or carried forward as a potential NPL listing candidate.

The CA will address all the data requirements of the revised HRS using field screening and NPL level Data Quality Objectives (DQO's) prior to data collection. It will also provide data in a format to support remedial investigation work plan development. Only sites that appear to score high enough for NPL consideration and that have not been deferred to another authority will move on to an Expanded Site Inspection (ESI).

2.0 Site Background

2.1 Site Description

The Dixon Groundwater Site is made up of a groundwater plume that has contaminated a number of residential private wells. The groundwater plume is currently known to be located with an area bordered by Chicago Avenue to the north, Fargo Avenue to the west and Keul road to the south and a storm water

retention basin to the east. It is believed that the groundwater plume currently affects approximately ten individual residents.

The Dixon Groundwater Site is an investigation of possible sources that may have contributed to the contamination observed in the groundwater south of Chicago Avenue. The source investigation has centered on the Industrial Park located in Section 3, Township 21-22 North, and Range 9 East. The Industrial Park investigation involved six properties that were bound by Warp Road to the east, Franklin Grove Road to the north, Anchor Road to the west and wooded land to the south. In addition to the six properties in the Industrial Park there were five properties not located in the Industrial Park that were also investigated.

The properties investigated during this CERCLA activity included: Borg Warner, Anchor Coupling, Flex O Glass, Loparex and Eyelet Products. Borg Warner manufactures aftermarket engine parts for cars. Borg Warner is currently classified as a small quantity waste generator and generates approximately two 55-gallon drums of ink conditioner waste per year. Anchor Coupling manufactures hose and couplings for the Caterpillar Tractor Company. Waste generated by Anchor Coupling include a solvent known as Shellsol D-60, in addition to some used oil.

2.2 Site History

The Dixon Groundwater Site came into existence due to a previous investigation of the Dixon Municipal Dump. The Dixon Municipal Dump investigation revealed contaminated drinking water wells that could not be contributed to contamination at the Municipal Dump at the time of the

investigation due to limited equipment available for the investigation. Therefore, the Dixon Groundwater Site was conducted to find other potential sources of the groundwater contamination within the area.

According to information obtained from the Expanded Site Inspection of the Dixon Municipal Dump, the City of Dixon registered the Dixon Municipal Dump with the Illinois Department of Public Health in 1968. During its operation, the landfill accepted household refuse as well as other material. In addition, the landfill received combustible and demolition wastes. There is no record of hazardous wastes being accepted at any time. After landfill operations ceased in 1971, it remained uncovered for approximately 10 years. Illinois EPA records show that in 1980 small quantities of unknown types of refuse were illegally disposed of at the landfill.

The landfill was covered by the City of Dixon in December of 1981. Cover material was obtained from an old abandoned cement plant in or near the City of Dixon. The cover material consisted of soils from a cement plant and old blocks/slabs of cement material. The thickness of the cover material has not been documented. However, an Illinois EPA memorandum regarding closure of the Dixon Municipal Dump site stated that cover material should be at least 2 feet thick. It is not known whether the cover material was tested for potential contaminants before placement of the cover.

Three groundwater-monitoring wells were installed on-site between November 13, 1981 and December 17, 1981. An additional three monitoring wells were installed on April 26, 1993 due to the fact that the three previously installed wells

had been damaged. All monitoring wells were sampled during the Combined Assessment of the Dixon Municipal Dump in April of 2002.

2.3 Previous Investigations

The Dixon Groundwater Site is an investigation that was conducted due to contaminated residential wells discovered during the Dixon Municipal Dump investigation. On September 10, 2001 and March 13, 2002, the Illinois EPA's Office of Site Evaluation prepared and submitted a work plan for the Dixon Municipal Dump to Region V offices of the USEPA. The first phase of sampling was conducted on September 26 and 27 of 2001 when the sampling team collected a total of eighteen residential well samples. The second phase of the sampling was conducted April 2-4, 2002, when the sampling team collected five monitoring well samples, eleven soil samples, and two groundwater samples.

During the first phase of the investigation the analytical results revealed the presence of inorganic compounds, and volatile organic compounds (VOC's) in residential wells that were greater than three times concentrations found in background wells. Specifically, elevated levels of arsenic, vinyl chloride and trichloroethylene (TCE) were identified in a number of the residential wells that were sampled.

The second phase of the Combined Assessment focused on the landfill itself. The analytical soil results revealed the presence of inorganic and organic compounds. The inorganic compounds that exceeded concentrations in the background sample were cadmium, magnesium and zinc. The organic compounds exceeding concentrations in the background sample were

Heptachlor epoxide, Dieldrin, 4,4'-DDT, alpha-Chlordane, gamma-Chlordane, and Aroclor-1248.

The Expanded Site Inspection of the Dixon Municipal Dump was conducted on November 12 – 14, 2002. At which time the sampling team collected nine sediment samples from eight different locations, three residential waters from two locations, four groundwater samples from four different locations and six soil samples from five different locations. The Dixon Groundwater Site, the subject of this report, took place due to information obtained in the IA and the ESI of the Dixon Municipal Dump.

3.0 Combined Assessment Activities

3.1 Sampling Activities

The Dixon Groundwater Site CA was conducted in two parts, the first occurred on May 9-12, 2005 and the second part was conducted June 13-15, 2005. The Membrane Interphase Probe (MIP) was used in the initial phases of this investigation. The Membrane Interface Probe (MIP) is an instrument with semi-quantitative capabilities that act as interface between the contaminants in the subsurface and gas phase detectors at the surface. The membrane is semi-permeable and is comprised of a thin film polymer impregnated into a stainless steel screen for support. The membrane is placed in a heated block attached to the probe. This block is heated to approximately 100-120 degrees Celsius. Heating the block helps accelerate diffusion of the contaminants in the

subsurface through the membrane. In addition after using the MIP, the sampling team collected 13 water samples and 25 soil samples.

3.1.1 Water Samples

During the CA of the Dixon Groundwater Site, nine residential water samples were collected and two groundwater samples were collected using the geoprobe (See Table 1). The samples were analyzed for Volatile Organic Compounds (VOC). Figure 1 illustrates the approximate locations of all water samples.

All groundwater samples were collected from the Flex O Glass property. Sample G101 (See Figure 1) was collected from MIP location 28 (See Figure 3). The groundwater sample was collected from a depth of 18 to 22 feet. Sample G102 was collected from MIP location 29, this sample was collected from a depth of 23.5 to 27.5 feet.

All residential well samples were obtained from outlets that bypassed water treatment systems and storage tanks. In order to ensure that the water supply had been purged of standing water, water was allowed to discharge from the outlets for a minimum of fifteen-minutes before samples were collected. During the fifteen-minute water purge, pH, temperature and conductivity were taken in five-minute intervals to establish stability. Once stability was obtained the water sample was taken. In accordance with US EPA quality assurance/quality control requirements, a duplicate residential well sample and a field blank sample were collected. Due to the fact that sampling took place on two different occasions there were two different duplicates obtained. The duplicate samples G205 and G209 were collected from location G204 and G208 respectively.

Samples G201 thru G203 and G211 were taken from residents on Chicago Avenue (RT 52), G207 was collected on Fargo Avenue, and G205, G206, G208, G209, and G210 were taken along Keul Rd (See Figure 1). Each residential well location was recorded using a Global Positioning System (GPS) so that the locations could be identified with geographic coordinates and re-visited at a later date if necessary.

3.1.2 Soil Samples

Twenty-five soil samples were collected during the CA conducted for the Dixon Groundwater Site. Samples X101 thru X125 were analyzed for VOC's. Figure 2 illustrates the approximate location of all soil samples collected. Table 2 contains the analytical values for all soil samples collected.

The soil samples were collected from the Industrial Park, the Shell Service Station located on the corner of Franklin Grove Road and Anchor Road, the Dixon Municipal Airport located on Franklin Grove Road and the Hopkins building on Chicago Ave. The Industrial Park is made up of Borg Warner, Loparex, Eyelet Products, Flex O Glass and Anchor Coupling. The soil samples were collected at different depths depending on the soil gas readings obtained from the MIP.

Soil sample X101 was collected from MIP boring 31 located at the Flex O Glass property (see figure 3 for locations of all MIP borings) and cored from four to eight feet. The actual sample was collected from a depth of six feet (See Figure 2). Sample X101 was made up of brown silty clay with traces of sand. Sample X102 was collected from MIP boring 28, also located on the Flex O

Glass property and cored from eight to 12 feet (See Figure 2). Sample X102 was collected from a depth of 11 feet below ground surface and consisted of gray silty clay with traces of sand. Sample X103 was collected from MIP boring 29 on the east side of the Flex O Glass facility next to the small compressor shed. The sample was collected from a depth of 11.5 feet below ground surface and consisted of brown silty clay with sand and some moisture.

Sample X104 was collected from MIP boring 20, which is located on the Eyelet Products property and cored from 2.5 to 6.5 feet. The sample was specifically located on the northwest side of the Eyelet Products building (See Figure 2) and sampled at the depth of 5 feet. The sample consisted of brown silty, sandy moist clay and weathered bedrock.

Sample X105 was collected from MIP boring 13 located at the Borg Warner property. The MIP detected hits from 5.8 to 27.1 feet. Two samples were collected from MIP boring 13. Sample X105 was cored from 8 to 12 feet and collected from ten feet. The sample consisted of brown clayey silt. Sample X106 was collected from a depth of 19 feet below ground surface. The sample consisted of brown clayey till, very hard. Sample X107 was collected from MIP boring 12 located at Borg Warner. The MIP detected hits from 6.2 to 26.8 feet. The sample was cored from 22 to 26 feet and collected at a depth of 23 feet below ground surface. The sample consisted of hard brown clay.

Sample X108 was collected from MIP boring 16 at the Loparex property. The sample was taken on the southeast side of the tank farm. The sample was cored from 4 to 8 feet and collected from a depth of 6 feet below ground surface. The

samples consisted of sandy, silty wet clay. Sample X109 and X110 were collected from MIP 18 at the Loparex property. The samples were taken on the southwest corner of the tank farm. MIP 18 had PID readings from a depth of 4.5 to 10.7 feet. Sample X109 was collected from a depth of 4.5 feet below ground surface and consisted of brown sandy silty clay and X110 was collected from a depth of 10.5 feet below ground surface and consisted of dark brown sandy silt. Sample X111 and X112 were collected from MIP boring 19 located on the southwest side of the tank farm next to the gate on the Loparex property. MIP boring 19 had a substantial hit on the MIP from 8.5 feet to 17.2 feet. Sample X111 was collected from a depth of 9 to 10 feet below ground surface and consisted of light tan to gray sandy silt (more sand than silt). Sample X112 was collected from 14.5 to 15 feet and consisted of light gray to white clay with sand.

Sample X113 was collected from MIP boring 9 at the Borg Warner property. The sample was collected from the 16-20 foot core and the actual sample was collected at 18 feet. The sample consisted of hard clay. Sample X114 was collected from MIP boring 10 at the Borg Warner property. The sample was collected from a depth of 15.5 feet below ground surface and consisted of hard silty clay with sand.

Sample X115 was collected from MIP boring 8 at the Anchor Coupling property (See Figure 2). Slight PID responses were detected at 12.5 to 22.2 feet. The sample was cored from 18 to 22 feet and collected from 19 feet. A triple volume sample was collected and the sample consisted of light brown sandy silty clay with cobbles.

Sample X116 and X117 were collected from MIP boring 33 at the Hopkins building located on Chicago Ave. Sample X117 is a duplicate of X116. There were slight PID responses at 7.9 feet and 9 feet. The sample consisted of sandy, silty clay and was collected at a depth of 8 feet below ground surface. Sample X118 was collected from MIP boring 34 at the Hopkins building. MIP boring 34 had PID responses at 7.3 feet and 9.6 feet. The sample was collected at 6.5 feet and consisted of sandy clay.

Sample X119 and X120 were collected from MIP boring one from the Shell Service Station property. The MIP detected PID responses from 25.7 feet to 28 feet. Sample X119 was collected from a depth of 15 feet below ground surface and consisted of silty sand with gravel and X120 was collected from 22 feet and consisted of silty sand with clay and gravel. Sample X121 thru X123 were collected from MIP boring three. Sample X121 was collected from 15 feet and consisted of silty sand with clay and gravel and X122 and X123 was collected from 31 feet and consisted of hard clay with sand and gravel. Sample X123 was a duplicate of X122.

Sample X124 was taken from MIP 42 located at the maintenance garage next to the airport (See Figure 2). The sample was collected from 11 feet. Sample X125 was collected from MIP 25 and was located at the Dixon City Dump, which is located in the Industrial Park (See Figure 2). The sample was collected from 11 feet and consisted of fine sand.

3.2 Analytical Results

This section presents results of the chemical analysis of water and soil samples collected by the Illinois EPA Office of Site Evaluation during the CA of the Dixon Groundwater Site. Complete chemical analysis results of the water and soil samples are provided in Tables 1 and 2.

Following sample collection, all samples were transferred to containers provided by Illinois EPA's Contract Laboratory Program. The sample containers were packaged and sealed in accordance with Illinois EPA's Office of Site Evaluation Quality Assurance Project Plan. The water samples requiring VOC analysis for part one of the CA were sent to Liberty Analytical in Cary, NC and water samples for part two were sent to A4 Scientific in The Woodlands, TX. The soil samples requiring VOC analysis for part one of the CA were sent to Envirosystems, INC in Columbia MD and soil samples for part two were sent to Liberty Analytical, NC. A complete analytical data package for the Dixon Groundwater Site is located in Volume 2 of the CA. The criteria used to determine what may be considered an observed release was based on those samples with concentrations considered to be at least three times those concentrations found in samples taken from background locations. Although some samples did not have contaminant concentrations greater than three times background, they were included in the key sample summary due to the fact they were above Maximum Contamination Limits (MCL), which can be found in Appendix C.

The analytical results of the residential well samples, which were analyzed for VOC's only, revealed the presence of compounds that exceeded observed release criteria. Observed release was documented in 12 of the drinking water samples. Samples G202 and G203 exceeded the MCL for Trichloroethene (TCE) (See Table 3).

The analytical results of the soil samples taken during the CA revealed the presence of organic compounds in the soil that exceeded three times background. The organic compounds that exceeded three times background include 1,1-Dichloroethene, 1,1-Dichloroethane, 1,1,1-Trichloroethane, and Methylcyclohexane. A summary of the organic soil analysis results can be found in Table 4 of this report.

4.0 Site Sources

This section includes descriptions of the various hazardous waste sources that have been identified in the Dixon Groundwater Site. The Hazard Ranking System defines a source as: "Any area where a hazardous substance has been stored, disposed or placed, plus those soils that have become contaminated from migration of a hazardous substance." The HRS definition of source does not include surface water or sediments below surface water that have become contaminated.

Information obtained during the IA identified one area, the groundwater plume, as the source of contamination for the Dixon Groundwater Site. As additional information becomes available, the possibility exists that additional sources of contamination may exist.

4.1 Groundwater Plume

The groundwater plume has presently been identified by water samples as a 2,690,978 square foot area (See Figure 6). The extent of the groundwater plume may be larger than presently known. The plume contains TCE at levels that exceed MCL's and has been found in residential drinking water wells.

Based on information gathered during the CA, the extent of contamination can be defined by the water samples collected from the groundwater plume. Water samples G201 thru G210 were collected from the defined groundwater plume. When compared to background sample G102, the water samples collected from the groundwater plume meet observed contamination criteria (See Table 3).

5.0 Migration Pathway

There exists within CERCLA three migration pathways and one exposure pathway by which hazardous substances may pose threat to human health and/or the environment. Consequently, sites are evaluated on their known or potential impact to these pathways. The pathways evaluated are groundwater migration, surface water migration, soil exposure, and air migration.

5.1 Groundwater

The surficial geological materials in the vicinity of the groundwater plume consist of approximately 10 to 180 feet of glacial deposits. These deposits consist of clay, sand, and gravel. The bedrock in the area of the groundwater

plume consists of the Ordovician Galena-Platteville Dolomite (70 to 230 feet), the Ordovician Glenwood-St. Peter Sandstone (230 to 475), and the Cambrian Mt. Simon sandstone (1585 to 1870 feet). The Ordovician Galena-Platteville Dolomite and the Ordovician Glenwood-St. Peter sandstone are both shallow aquifers and the Cambrian Mt. Simon Sandstone is a deep aquifer. Depths to the Galena-Platteville Dolomite in the area of the groundwater plume are approximately 20 feet. Area well logs show that all residential wells in Lee County, Illinois, are finished in one of the aforementioned shallow aquifers.

Dixon's municipal wells are finished in the deep aquifer, the Cambrian Mt. Simon Sandstone. The city of Dixon uses five municipal wells that are located to the north and within a 4-mile radius of the groundwater plume (See Appendix D).

In the groundwater plume, the glacial deposits and the Galena-Platteville Dolomite form the aquifer of concern. It is assumed that shallow groundwater movement in the vicinity of the groundwater plume is toward the north-northwest and eventually toward the Rock River.

The groundwater migration pathway is a pathway of concern because during the CA, hazardous compounds were found to be present in residential drinking water wells. The Dixon Groundwater Site was created after an Expanded Site Inspection of the Dixon Municipal Landfill did not reveal the source of area wide groundwater contamination. During the ESI there were residential well samples that were found to contain TCE at levels above MCL's. The ESI of the Dixon Municipal Landfill did not show attribution of the landfill to the groundwater plume. Although, due to geological conditions within the Dixon area, the

investigation at the Dixon Municipal Dump was limited and does not exonerate the Dixon Municipal Dump as the possible source of the groundwater plume.

As a result of previous investigations it was determined that groundwater and soil analyzed over the course of this event did not have to be analyzed for the entire TCL (Target Compound List). Consequently, samples were only analyzed for volatile organic compounds. The volatile compounds that exceeded background include, Dichlorodifluoromethane, vinyl chloride, chloroethane, 1,1-Dichloroethene, 1,1 – Dichloroethane, cis – 1,2-Dichloroethene, 1,1,1-Trichloroethane, Trichloroethene, Methylcyclohexane, 1,2-Dichloropropane, Tetrachloroethene, Chlorobenzene, 1,3-Dichlorobenzene, 1,4- Dichlorobenzene, and 1,2-Dichlorobenzene.

The compound discovered during the CA of concern in residential wells is trichloroethene with a Superfund Chemical Data Matrix (SCDM) value of 7.7 ug/L. The highest trichloroethene value in a residential well was 15 ug/L.

5.2 Surface Water

Surface water in the Dixon Groundwater Site is contained in Fargo Creek, which originates just south of the Dixon Municipal Airport and runs west through the retention basin and two confluent streams located on the Dixon Municipal Dump. The retention basin was investigated during the Expanded Site Inspection of the Dixon Municipal Dump and samples were taken from Fargo Creek. One of the two confluent streams originates south of the Dixon Municipal Dump and flows northward, through the middle of the site. The other stream originates in the southeastern corner of the Dixon Municipal Dump and flows in a

northwesterly direction. The confluence of the streams is in the north-central section of the landfill, the stream flows offsite through a culvert under the railroad tracks north of the landfill in Fargo Creek. Surface runoff that does not flow into these streams enters adjacent farm fields. The nearest permanent surface water body to the site is the Rock River, which is located approximately one mile north of the Dixon Groundwater Site plume. According to the ESI of the Dixon Municipal Dump the intermittent stream that runs through the dump site and exits at the north border eventually runs into the Rock River (See Appendix D).

The PPE is defined as the point at which the overland segment of a hazardous substance migration path intersects with surface water. The PPE is assigned as the point at which entry of the hazardous substances to surface water is most likely. The target distance limit is the distance over which the in-water segment of the hazardous substance migration path is evaluated. The TDL extends 15 miles from the PPE in the direction of flow or to the most distant sample point establishing an observed release; whichever is greater (See Appendix D).

The Rock River is not used as a source of drinking water. However, according to USGS topographic maps and observations made during the investigation, the Rock River and Fargo Creek are used for recreational purposes. The Henepin Canal Parkway State Park is located along the Rock River, 6.5 miles downstream from the probable point of entry.

During the ESI of the Dixon Municipal Dump, eight sediment samples were collected from Fargo Creek located in the storm water retention basin. There were no organics found that exceeded the three times background value.

5.3 Soil Exposure

The Dixon Groundwater Site consisted of soil samples obtained from the industrial park, the shell service station, the Dixon Municipal Airport and the Hopkins property (See Figure 5). The industrial park, shell service station and Dixon Municipal Airport are located on Franklin Grove Road and the Hopkins building is located on Chicago Ave.

Two soil samples had organic compounds that were above background sample X115. The two soil samples were X107 and X111. Sample X107 contained 1,1-Dichloroethene, 1,1- Dichloroethane and 1,1,1-Trichloroethane. Sample X111 contained methcyclohexane (See Table 4). The soil samples collected are thought to be of minimal concern at this time.

Nearby population within one-mile of the site

On-site	100
0-1/4	256
1/4-1/2	302
1/2 - 1 mile	358

5.4 Air Pathway

A release of VOC compounds to the air was not documented during the IA of the Dixon Groundwater Site. A potential for VOC compounds to migrate from the

site via windblown particulates is low because the entire site is completely covered with vegetation and housing, minimizing dusty conditions.

Individuals potentially exposed to air-borne contaminants

On-site	100
0-1/4	256
1/4-1/2	302
1/2-1mile	358
1-2 miles	9694
2-3 miles	3643
3-4 miles	909

7.0 References

Illinois Environmental Protection Agency, CERCLA Expanded Site Inspection
Dixon Municipal Dump, Springfield, Illinois.

FIGURES AND TABLES

Figure 1

Dixon Groundwater Study

Drinking Water Samples



Figure 2

Dixon Groundwater Study

Soil Samples



Figure 3

Dixon Groundwater Study

MIP Locations



Dixon Groundwater Study
Dixon, Illinois



FIGURE 4
SITE LOCATION MAP

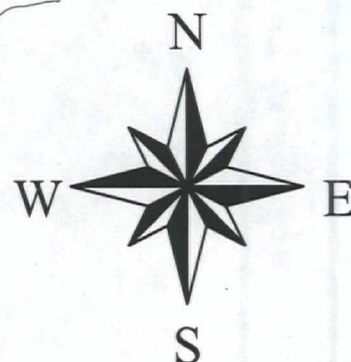


Figure 5

Dixon Groundwater Study

Location of Soil Samples

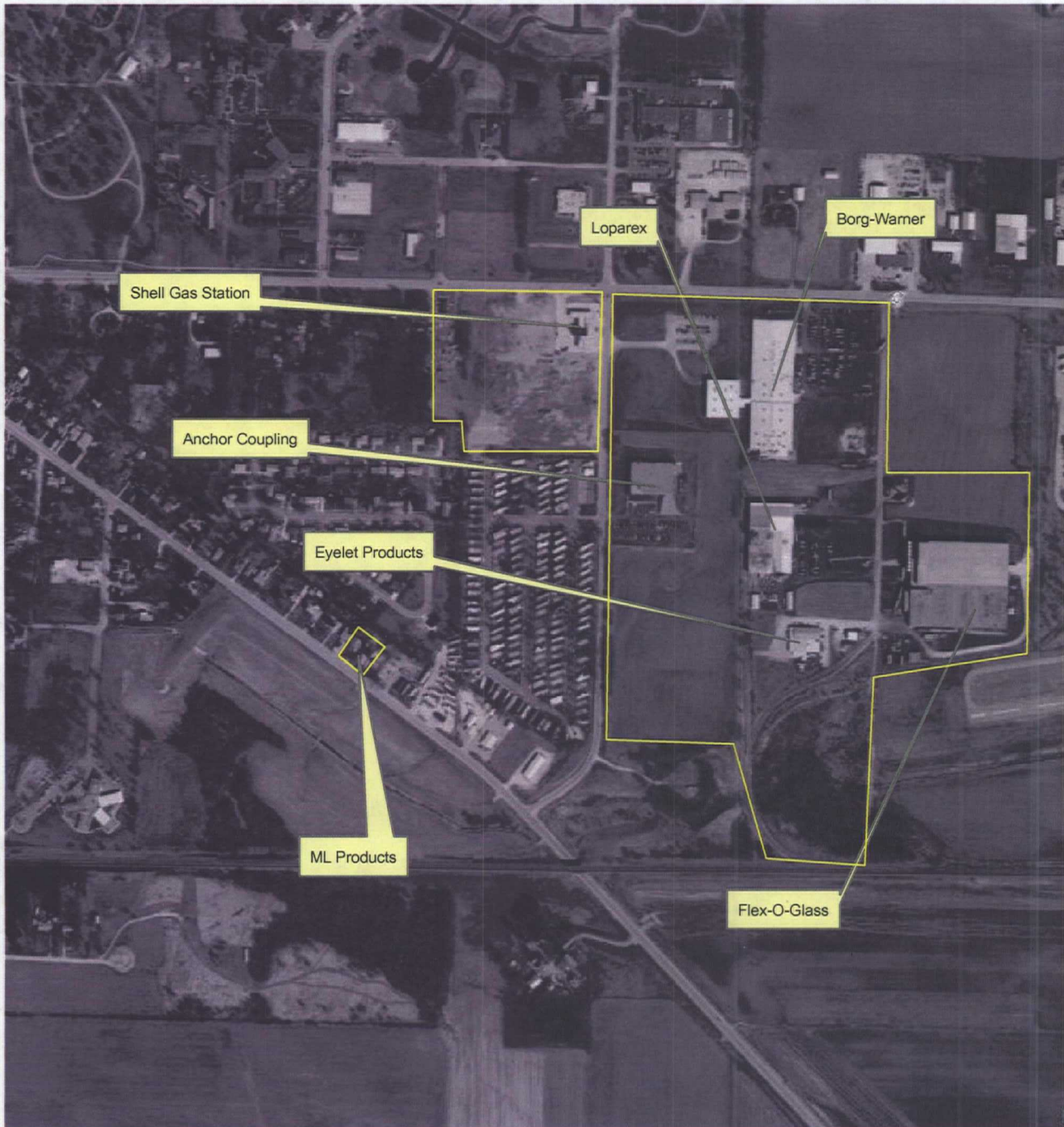


Figure 6
Dixon Groundwater Study
Groundwater Plume



TABLE 1

DIXON GROUNDWATER STUDY

VOLATILE WATER SAMPLES

Sample Number :	E0005		E0007		E0011		E0012		E0014		E0015	
Sampling Location :	G101		G102		G201		G202		G203		G204	
Matrix :	Water		Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	5/9/2005		5/9/2005		5/10/2005		5/10/2005		5/10/2005		5/10/2005	
Time Sampled :	14:30		14:30		09:30		10:25		10:55		11:45	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		N/A	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.64	
Chloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Vinyl Chloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethene	4.2	J	0.50	UJ	1.1	J	6.9	J	0.13	J	0.10	J
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	UJ	0.50	UJ	0.11	J	0.56	J	0.50	UJ	0.50	UJ
Acetone	5.0	UJ	5.0	UJ	5.0	U	5.0	U	5.0	U	5.0	U
Carbon Disulfide	0.14	J	0.14	J	0.50	U	0.50	UJ	0.50	UJ	0.50	UJ
Methyl Acetate	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ
Methylene Chloride	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ
trans-1,2-Dichloroethene	0.50	U	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
Methyl tert-Butyl Ether	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethane	10		0.50	U	0.18	J	1.2		0.50	U	1.3	
cis-1,2-Dichloroethene	0.50	UJ	0.50	UJ	0.72	J	1.7	J	3.2	J	0.54	J
2-Butanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Bromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroform	0.11	J	0.50	U	0.11	J	0.17	J	0.42	J	0.50	U
1,1,1-Trichloroethane	2.9		0.50	U	2.5		16		0.15	J	0.50	U
Cyclohexane	0.50	UJ	0.24	J	0.50	U	0.50	U	0.50	U	0.50	U
Carbon Tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Benzene	0.14	J	0.18	J	0.50	UJ	0.50	U	0.50	U	0.50	U
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichloroethene	0.50	U	0.50	U	4.6	J	15		5.6		0.32	J
Methylcyclohexane	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloropropane	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromodichloromethane	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,3-Dichloropropene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Toluene	0.52		0.36	J	0.50	UJ	0.50	U	0.50	U	0.50	U
trans-1,3-Dichloropropene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	0.15	J	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Tetrachloroethene	0.50	U	0.50	U	1.6		3.5		1.1		0.14	J
2-Hexanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	0.50	U	0.50	U	0.50	UJ	0.50	U	0.50	U	0.50	U
Ethylbenzene	0.29	J	0.14	J	0.50	U	0.50	U	0.50	U	0.50	U
Xylenes (total)	0.27	J	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Styrene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Isopropylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,3-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,4-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromo-3-chloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,3-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

TABLE 1
DIXON GROUNDWATER STUDY
VOLATILE WATER SAMPLES (cont.)

Sample Number :	E0016		E0017		E0018		E00T6		E00T7		E00T8		E00W3	
Sampling Location :	G205		G206		G207		G208		G209		G210		G211	
Matrix :	Water		Water		Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	5/10/2005		5/10/2005		5/10/2005		6/14/2005		6/14/2005		6/14/2005		6/15/2005	
Time Sampled :	11:45		12:30		13:20		08:50		08:50		09:55		15:00	
Dilution Factor :	N/A		N/A		N/A		N/A		N/A		N/A		N/A	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.70		1.2		0.26	J	0.50	U	0.50	U	0.50	U	0.50	U
Chloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Vinyl Chloride	0.50	U	0.91		0.50	U	0.22	J	0.50	U	0.50	U	0.50	U
Bromomethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroethane	0.50	U	0.78		0.50	U	0.19	J	0.50	U	1.1		0.50	U
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethene	0.50	U	0.50	U	0.46	J	0.50	U	0.50	U	0.50	U	1.0	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.14	J	0.50	U	0.18	J	0.50	U	0.50	U	0.50	U	0.50	U
Acetone	5.0	U	5.0	U	5.0	U	0.76	J	5.0	U	5.0	U	5.0	U
Carbon Disulfide	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl Acetate	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylene Chloride	0.50	U	0.50	U	0.50	U	0.50	U	0.69	J	0.83	J	0.74	J
trans-1,2-Dichloroethene	0.50	U	0.16	J	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl tert-Butyl Ether	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethane	1.4		2.5		0.50	U	0.84		0.96		2.5		0.50	U
cis-1,2-Dichloroethene	0.62	J	1.8	J	0.31	J	0.37	J	0.44	J	2.4		0.17	J
2-Butanone	5.0	U	5.0	U	5.0	U	0.34	J	5.0	U	5.0	U	5.0	U
Bromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,1-Trichloroethane	0.50	U	0.50	U	1.1		0.50	U	0.50	U	0.50	U	2.5	
Cyclohexane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Carbon Tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Benzene	0.50	U	0.42	J	0.50	U	0.33	J	0.36	J	0.50	U	0.50	U
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	0.17	J	0.50	U	0.50	U	0.50	U
Trichloroethene	0.20	J	0.27	J	2.3		0.50	U	0.50	U	0.50	U	3.1	
Methylcyclohexane	0.50	U	0.50	U	0.50	U	0.98		0.50	U	0.50	U	0.50	U
1,2-Dichloropropane	0.50	U	0.50	U	0.50	U	1.0		0.50	U	0.50	U	0.50	U
Bromodichloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Toluene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Tetrachloroethene	0.18	J	0.18	J	1.6		0.50	U	0.50	U	0.50	U	1.6	
2-Hexanone	5.0	U	5.0	U	5.0	U	0.43	J	5.0	U	5.0	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	0.50	U	1.7		0.50	U	1.2		1.4		1.0		0.50	U
Ethylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Xylenes (total)	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Styrene	0.50	U	0.50	U	0.50	U	0.50	U	0.37	J	0.50	U	0.50	U
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Isopropylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,3-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	1.0		1.0		0.50	U
1,4-Dichlorobenzene	0.50	U	1.0		0.50	U	0.50	U	0.84		0.84		0.50	U
1,2-Dichlorobenzene	0.50	U	0.56		0.50	U	0.50	U	0.49	J	0.63		0.50	U
1,2-Dibromo-3-chloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,3-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

TABLE 2

DIXON GROUNDWATER STUDY

SOIL SAMPLES

Sample Number :	E0001		E0002		E0006		E0008		E0009		E0010	
Sampling Location :	X101		X102		X103		X104		X105		X106	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/9/2005		5/9/2005		5/9/2005		5/10/2005		5/10/2005		5/10/2005	
Time Sampled :	10:10		13:10		16:30		11:20		14:00		14:00	
%Moisture :	28		26		27		28		31		27	
pH :	7.0		7.0		7.0		7.0		7.0		7.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0	
Volatle Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	11	U	11	U	11	U	12	U	12	U	11	U
CHLOROMETHANE	11	U	11	U	11	U	12	U	12	U	11	U
VINYL CHLORIDE	11	U	11	U	11	U	12	U	12	U	11	U
BROMOMETHANE	11	U	11	U	11	U	12	U	12	U	11	U
CHLOROETHANE	11	U	11	U	11	U	12	U	12	U	11	U
TRICHLOROFLUOROMETHANE	11	U	11	U	11	U	12	U	12	U	11	U
1,1-DICHLOROETHENE	11	U	11	U	11	U	12	U	12	U	11	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	11	U	11	U	11	U	12	U	12	U	11	U
ACETONE	11	UJ	11	UJ	11	UJ	12	UJ	12	UJ	11	UJ
CARBON DISULFIDE	11	UJ	11	UJ	11	UJ	12	UJ	12	UJ	11	UJ
METHYL ACETATE	11	U	11	U	11	U	12	U	12	U	11	U
METHYLENE CHLORIDE	3	J	4	J	3	J	3	J	3	J	3	J
TRANS-1,2-DICHLOROETHENE	11	U	11	U	11	U	12	U	12	U	11	U
METHYL TERT-BUTYL ETHER	11	U	11	U	11	U	12	U	12	U	11	U
1,1-DICHLOROETHANE	11	U	11	U	11	U	12	U	12	U	11	U
CIS-1,2-DICHLOROETHENE	11	U	11	U	11	U	12	U	12	U	11	U
2-BUTANONE	11	UJ	11	UJ	11	UJ	12	UJ	12	UJ	11	UJ
CHLOROFORM	11	U	11	U	11	U	12	U	12	U	11	U
1,1,1-TRICHLOROETHANE	11	U	11	U	11	U	12	U	12	U	11	U
CYCLOHEXANE	11	U	11	U	11	U	12	U	12	U	11	U
CARBON TETRACHLORIDE	11	U	11	U	11	U	12	U	12	U	11	U
BENZENE	11	U	11	U	11	U	12	U	12	U	11	U
1,2-DICHLOROETHANE	11	U	11	U	11	U	12	U	12	U	11	U
TRICHLOROETHENE	11	U	11	U	11	U	12	U	12	U	11	U
METHYLCYCLOHEXANE	11	U	11	U	11	U	12	U	12	U	11	U
1,2-DICHLOROPROPANE	11	U	11	U	11	U	12	U	12	U	11	U
BROMODICHLOROMETHANE	11	U	11	U	11	U	12	U	12	U	11	U
CIS-1,3-DICHLOROPROPENE	11	U	11	U	11	U	12	U	12	U	11	U
4-METHYL-2-PENTANONE	11	UJ	11	UJ	11	UJ	12	UJ	12	UJ	11	UJ
TOLUENE	3	J	4	J	3	J	4	J	3	J	3	J
TRANS-1,3-DICHLOROPROPENE	11	U	11	U	11	U	12	U	12	U	11	U
1,1,2-TRICHLOROETHANE	11	U	11	U	11	U	12	U	12	U	11	U
TETRACHLOROETHENE	11	U	11	U	11	U	12	U	12	U	11	U
2-HEXANONE	11	UJ	11	UJ	11	UJ	12	UJ	12	UJ	11	UJ
DIBROMOCHLOROMETHANE	11	U	11	U	11	U	12	U	12	U	11	U
1,2-DIBROMOETHANE	11	U	11	U	11	U	12	U	12	U	11	U
CHLOROBENZENE	11	U	11	U	11	U	12	U	12	U	11	U
ETHYLBENZENE	11	U	11	U	11	U	12	U	12	U	11	U
XYLENES (TOTAL)	11	U	2	J	11	U	12	U	12	U	11	U
STYRENE	11	U	11	U	11	U	12	U	12	U	11	U
BROMOFORM	11	U	11	U	11	U	12	U	12	U	11	U
ISOPROPYLBENZENE	11	U	11	U	11	U	12	U	12	U	11	U
1,1,2,2-TETRACHLOROETHANE	11	U	11	U	11	U	12	U	12	U	11	U
1,3-DICHLOROBENZENE	11	U	11	U	11	U	12	U	12	U	11	U
1,4-DICHLOROBENZENE	11	U	11	U	11	U	12	U	12	U	11	U
1,2-DICHLOROBENZENE	11	U	11	U	11	U	12	U	12	U	11	U
1,2-DIBROMO-3-CHLOROPROPANE	11	U	11	U	11	U	12	U	12	U	11	U
1,2,4-TRICHLOROBENZENE	11	UJ	11	UJ	11	UJ	12	UJ	12	UJ	11	UJ

TABLE 2
DIXON GROUNDWATER STUDY
SOIL SAMPLES (cont.)

Sample Number :	E0026		E0021		E0022		E0023		E0024		E0025	
Sampling Location :	X107		X108		X109		X110		X111		X112	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/11/2005		5/11/2005		5/11/2005		5/11/2005		5/11/2005		5/11/2005	
Time Sampled :	14:30		08:35		09:40		09:50		12:00		12:10	
%Moisture :	31		30		26		27		28		22	
pH :	7.0		7.0		7.0		7.0		7.0		7.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	12	U	12	U	11	U	15	U	11	U	10	U
CHLOROMETHANE	12	U	12	U	11	U	15	U	11	U	10	U
VINYL CHLORIDE	12	U	12	U	11	U	15	U	11	U	10	U
BROMOMETHANE	12	U	12	U	11	U	15	U	11	U	10	U
CHLOROETHANE	12	U	12	U	11	U	15	U	11	U	10	U
TRICHLOROFLUOROMETHANE	12	U	12	U	11	U	15	U	11	U	10	U
1,1-DICHLOROETHENE	130		12	U	11	U	15	U	11	U	10	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	12	U	12	U	11	U	15	U	11	U	10	U
ACETONE	12	UJ	12	UJ	11	UJ	15	UJ	19	UJ	10	UJ
CARBON DISULFIDE	12	UJ	12	UJ	11	UJ	15	UJ	11	UJ	10	UJ
METHYL ACETATE	12	U	12	U	11	U	15	U	11	U	10	U
METHYLENE CHLORIDE	12	UJ	4	J	4	J	7	J	11	UJ	10	UJ
TRANS-1,2-DICHLOROETHENE	12	U	12	U	11	U	15	U	11	U	10	U
METHYL TERT-BUTYL ETHER	12	U	12	U	11	U	15	U	11	U	10	U
1,1-DICHLOROETHANE	97		12	U	11	U	15	U	11	U	10	U
CIS-1,2-DICHLOROETHENE	5	J	12	U	11	U	15	U	11	U	10	U
2-BUTANONE	12	UJ	12	UJ	11	UJ	15	UJ	11	UJ	10	UJ
CHLOROFORM	12	U	12	U	11	U	15	U	11	U	10	U
1,1,1-TRICHLOROETHANE	59		12	U	11	U	15	U	11	U	10	U
CYCLOHEXANE	12	U	12	U	11	U	15	U	11	U	10	U
CARBON TETRACHLORIDE	12	U	12	U	11	U	15	U	11	U	10	U
BENZENE	12	U	12	U	11	U	15	U	11	U	10	U
1,2-DICHLOROETHANE	12	U	12	U	11	U	15	U	11	U	10	U
TRICHLOROETHENE	12	U	12	U	11	U	15	U	11	U	10	U
METHYLCYCLOHEXANE	12	U	12	U	11	U	15	U	71		10	U
1,2-DICHLOROPROPANE	12	U	12	U	11	U	15	U	11	U	10	U
BROMODICHLOROMETHANE	12	U	12	U	11	U	15	U	11	U	10	U
CIS-1,3-DICHLOROPROPENE	12	U	12	U	11	U	15	U	11	U	10	U
4-METHYL-2-PENTANONE	12	UJ	12	UJ	11	UJ	15	UJ	11	UJ	10	UJ
TOLUENE	12	U	12	U	3	J	5	J	11	U	10	U
TRANS-1,3-DICHLOROPROPENE	12	U	12	U	11	U	15	U	11	U	10	U
1,1,2-TRICHLOROETHANE	12	U	12	U	11	U	15	U	11	U	10	U
TETRACHLOROETHENE	10	J	12	U	11	U	15	U	11	U	10	U
2-HEXANONE	12	U	12	UJ	11	UJ	15	UJ	11	U	10	U
DIBROMOCHLOROMETHANE	12	U	12	U	11	U	15	U	11	U	10	U
1,2-DIBROMOETHANE	12	U	12	U	11	U	15	U	11	U	10	U
CHLOROBENZENE	12	U	12	U	11	U	15	U	11	U	10	U
ETHYLBENZENE	12	U	12	U	11	U	15	U	11	U	10	U
XYLENES (TOTAL)	12	U	12	U	11	U	15	U	11	U	10	U
STYRENE	12	U	12	U	11	U	15	U	11	U	10	U
BROMOFORM	12	U	12	U	11	U	15	U	11	U	10	U
ISOPROPYLBENZENE	12	U	12	U	11	U	15	U	11	U	10	U
1,1,2,2-TETRACHLOROETHANE	12	U	12	U	11	U	15	U	11	U	10	U
1,3-DICHLOROBENZENE	12	U	12	U	11	U	15	U	11	U	10	U
1,4-DICHLOROBENZENE	12	U	12	U	11	U	15	U	11	U	10	U
1,2-DICHLOROBENZENE	12	U	12	U	11	U	15	U	11	U	10	U
1,2-DIBROMO-3-CHLOROPROPANE	12	U	12	U	11	U	15	U	11	U	10	U
1,2,4-TRICHLOROBENZENE	12	U	12	UJ	11	UJ	15	UJ	11	U	10	U

TABLE 2
DIXON GROUNDWATER STUDY
SOIL SAMPLES (cont.)

Sample Number :	E0027		E0028		E0029		E0030		E0031		E0032	
Sampling Location :	X113		X114		X115		X116		X117		X118	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/11/2005		5/11/2005		5/12/2005		5/12/2005		5/12/2005		5/12/2005	
Time Sampled :	15:15		16:55		12:20		14:00		14:00		14:50	
%Moisture :	22		24		24		24		24		24	
pH :	7.0		7.0		7.0		7.0		7.0		7.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	10	U	10	U	10	U	11	U	11	U	10	U
CHLOROMETHANE	10	U	10	U	10	U	11	U	11	U	10	U
VINYL CHLORIDE	10	U	10	U	10	U	11	U	11	U	10	U
BROMOMETHANE	10	U	10	U	10	U	11	U	11	U	10	U
CHLOROETHANE	10	U	10	U	10	U	11	U	11	U	10	U
TRICHLOROFLUOROMETHANE	10	U	10	U	10	U	11	U	11	U	10	U
1,1-DICHLOROETHENE	10	U	10	U	10	U	11	U	11	U	10	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10	U	10	U	10	U	11	U	11	U	10	U
ACETONE	10	UJ	10	UJ	10	UJ	11	UJ	11	UJ	10	UJ
CARBON DISULFIDE	10	UJ	10	UJ	10	UJ	11	UJ	11	UJ	10	UJ
METHYL ACETATE	10	U	10	U	10	U	11	U	11	U	10	U
METHYLENE CHLORIDE	10	UJ	10	UJ	10	UJ	11	UJ	11	UJ	10	UJ
TRANS-1,2-DICHLOROETHENE	10	U	10	U	10	U	11	U	11	U	10	U
METHYL TERT-BUTYL ETHER	10	U	10	U	10	U	11	U	11	U	10	U
1,1-DICHLOROETHANE	10	U	10	U	10	U	11	U	11	U	10	U
CIS-1,2-DICHLOROETHENE	10	U	10	U	10	U	11	U	11	U	10	U
2-BUTANONE	10	UJ	10	UJ	10	UJ	11	UJ	11	UJ	10	UJ
CHLOROFORM	10	U	10	U	10	U	11	U	11	U	10	U
1,1,1-TRICHLOROETHANE	10	U	10	U	10	U	11	U	11	U	10	U
CYCLOHEXANE	10	U	10	U	10	U	11	U	11	U	10	U
CARBON TETRACHLORIDE	10	U	10	U	10	U	11	U	11	U	10	U
BENZENE	10	U	10	U	10	U	11	U	11	U	10	U
1,2-DICHLOROETHANE	10	U	10	U	10	U	11	U	11	U	10	U
TRICHLOROETHENE	10	U	10	U	10	U	11	U	11	U	10	U
METHYLCYCLOHEXANE	10	U	10	U	10	U	11	U	11	U	10	U
1,2-DICHLOROPROPANE	10	U	10	U	10	U	11	U	11	U	10	U
BROMODICHLOROMETHANE	10	U	10	U	10	U	11	U	11	U	10	U
CIS-1,3-DICHLOROPROPENE	10	U	10	U	10	U	11	U	11	U	10	U
4-METHYL-2-PENTANONE	10	UJ	10	UJ	10	UJ	11	UJ	11	UJ	10	UJ
TOLUENE	10	U	3	J	10	U	11	U	11	U	10	U
TRANS-1,3-DICHLOROPROPENE	10	U	10	U	10	U	11	U	11	U	10	U
1,1,2-TRICHLOROETHANE	10	U	10	U	10	U	11	U	11	U	10	U
TETRACHLOROETHENE	10	U	10	U	10	U	11	U	11	U	10	U
2-HEXANONE	10	U	10	U	10	U	11	U	11	U	10	U
DIBROMOCHLOROMETHANE	10	U	10	U	10	U	11	U	11	U	10	U
1,2-DIBROMOETHANE	10	U	10	U	10	U	11	U	11	U	10	U
CHLOROBENZENE	10	U	10	U	10	U	11	U	11	U	10	U
ETHYLBENZENE	10	U	10	U	10	U	11	U	11	U	10	U
XYLENES (TOTAL)	10	U	10	U	10	U	11	U	11	U	10	U
STYRENE	10	U	10	U	10	U	11	U	11	U	10	U
BROMOFORM	10	U	10	U	10	U	11	U	11	U	10	U
ISOPROPYLBENZENE	10	U	10	U	10	U	11	U	11	U	10	U
1,1,2,2-TETRACHLOROETHANE	10	U	10	U	10	U	11	U	11	U	10	U
1,3-DICHLOROBENZENE	10	U	10	U	10	U	11	U	11	U	10	U
1,4-DICHLOROBENZENE	10	U	10	U	10	U	11	U	11	U	10	U
1,2-DICHLOROBENZENE	10	U	10	U	10	U	11	U	11	U	10	U
1,2-DIBROMO-3-CHLOROPROPANE	10	U	10	U	10	U	11	U	11	U	10	U
1,2,4-TRICHLOROBENZENE	10	U	10	U	10	U	11	U	11	U	10	U

TABLE 2
DIXON GROUNDWATER STUDY
SOIL SAMPLES (cont.)

Sample Number :	E00T1		E00T2		E00T3		E00T4		E00T5		E00W1		E00W2	
Sampling Location :	X119		X120		X121		X122		X123		X124		X125	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	6/13/2005		6/13/2005		6/14/2005		6/14/2005		6/14/2005		6/14/2005		6/15/2005	
Time Sampled :	14:30		15:45		09:30		10:45		10:45		15:50		09:40	
%Moisture :	9		10		9		16		16		17		11	
pH :	7.0		7.0		7.0		7.0		7.0		7.0		7.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
CHLOROMETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
VINYL CHLORIDE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
BROMOMETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
CHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
TRICHLOROFLUOROMETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1-DICHLOROETHENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
ACETONE	10	U	10	U	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
CARBON DISULFIDE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
METHYL ACETATE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
METHYLENE CHLORIDE	10	U	10	U	2		2		2		10	U	2	U
TRANS-1,2-DICHLOROETHENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
METHYL TERT-BUTYL ETHER	10	UJ	10	UJ	10	U	10	U	10	U	10	U	10	U
1,1-DICHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
CIS-1,2-DICHLOROETHENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-BUTANONE	10	U	10	U	10	U	10	U	10	U	10	U	10	UJ
CHLOROFORM	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,1-TRICHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
CYCLOHEXANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
CARBON TETRACHLORIDE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
BENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-DICHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
TRICHLOROETHENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
METHYLCYCLOHEXANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-DICHLOROPROPANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
BROMODICHLOROMETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
CIS-1,3-DICHLOROPROPENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-METHYL-2-PENTANONE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
TOLUENE	10	U	10	U	10	U	10	U	10	U	10	U		2
TRANS-1,3-DICHLOROPROPENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-TRICHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
TETRACHLOROETHENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-HEXANONE	10	U	10	U	10	U	10	U	10	U	10	U	10	UJ
DIBROMOCHLOROMETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-DIBROMOETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
CHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
ETHYLBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
XYLENES (TOTAL)	10	U	10	U	10	U	10	U	10	U	10	U	10	U
STYRENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
BROMOFORM	10	U	10	U	10	U	10	U	10	U	10	U	10	U
ISOPROPYLBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2,2-TETRACHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,3-DICHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,4-DICHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-DICHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-DIBROMO-3-CHLOROPROPANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2,4-TRICHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U

TABLE 3
DIXON GROUNDWATER STUDY
KEY SAMPLE SUMMARY
VOLATILE WATER SAMPLES

Sample Number :	E0007	E0005	E0011	E0012	E0014	E0015	E0016	E0017	E0018	E00T6	E00T7	E00T8	E00W3
Sampling Location :	G102	G101	G201	G202	G203	G204	G205	G206	G207	G208	G209	G210	G211
Matrix :	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Units :	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Date Sampled :	5/9/2005	5/9/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	6/14/2005	6/14/2005	6/14/2005	6/15/2005
Time Sampled :	14:30	14:30	09:30	10:25	10:55	11:45	11:45	12:30	13:20	08:50	08:50	09:55	15:00
Dilution Factor :	1.0	1.0	1.0	1.0	1.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Volatile Compound	BACKGROUND	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U						0.64		0.70		1.2	
Vinyl Chloride	0.5	U								0.91			
Chloroethane	0.5	U								0.78		1.1	
1,1-Dichloroethene	0.50	UJ				6.9	J						1.0
1,1-Dichloroethane	0.50	U	10			1.2		1.3		1.4		2.5	0.50
cis-1,2-Dichloroethene	0.5	UJ								1.8	J	2.4	0.17
1,1,1-Trichloroethane	0.50	U	2.9		2.5	16				1.1			2.5
Trichloroethene	0.50	U		4.6	J	15		5.6			2.3		3.1
Methylcyclohexane	0.5	UJ										0.98	
1,2-Dichloropropane	0.5	UJ								1.0			
Tetrachloroethene	0.50	U		1.6		3.5		1.1			1.6		1.6
Chlorobenzene	0.5	U								1.7		1.4	1.0
1,3-Dichlorobenzene	0.5	U										1.0	1.0
1,4-Dichlorobenzene	0.5	U								1.0		0.84	
1,2-Dichlorobenzene	0.5	U								0.56		0.63	

TABLE 4

DIXON GROUNDWATER STUDY

KEY SAMPLE SUMMARY

VOLATILE SOIL SAMPLES

Sample Number :	E0029	E0026	E0024			
Sampling Location :	X115	X107	X111			
Matrix :	Soil	Soil	Soil			
Units :	ug/Kg	ug/Kg	ug/Kg			
Date Sampled :	5/12/2005	5/11/2005	5/11/2005			
Time Sampled :	12:20	14:30	12:00			
%Moisture :	24	31	28			
pH :	7.0	7.0	7.0			
Dilution Factor :	1.0	1.0	1.0			
Volatile Compound	BACKGROUND		Result	Flag	Result	Flag
1,1-DICHLOROETHENE	10	U	130			
1,1-DICHLOROETHANE	10	U	97			
1,1,1-TRICHLOROETHANE	10	U	59			
METHYLCYCLOHEXANE	10	U			71	

APPENDIX A

PHOTOS



PHOTOGRAPHS

Dixon Groundwater Study
Dixon, Illinois - Lee County

DATE: 5/09/05

TIME: 1430

DIRECTION: East

PHOTO by: Tony Wasilewski

COMMENTS:

Water sample G101 was collected
From 18-22 feet. Collected on the
east side of the Flex O Glass facility.



DATE: 5/09/05

TIME: 1730

DIRECTION: South

PHOTO by: Tony Wasilewski

COMMENTS:

Water sample G102 was collected
from MIP location 29. The
groundwater sample was screened
from 23.5-27.5 feet.





PHOTOGRAPHS

Dixon Groundwater Study
Dixon, Illinois - Lee County

DATE: 5/10/05

TIME: 0930

DIRECTION: East

PHOTO by: Tony Wasilewski

COMMENTS:

Sample G201 was taken from a
resident on Exemption 6 - Non-Responsive. Sample
was collected from an outside spigot.



DATE: 5/10/05

TIME: 1025

DIRECTION: West

PHOTO by: Tony Wasilewski

COMMENTS:

Sample G202 was taken from a
resident on Exemption 6 - Non-Responsive. Sample
was collected from an outside spigot.





PHOTOGRAPHS

Dixon Groundwater Study
Dixon, Illinois - Lee County

DATE: 5/10/05

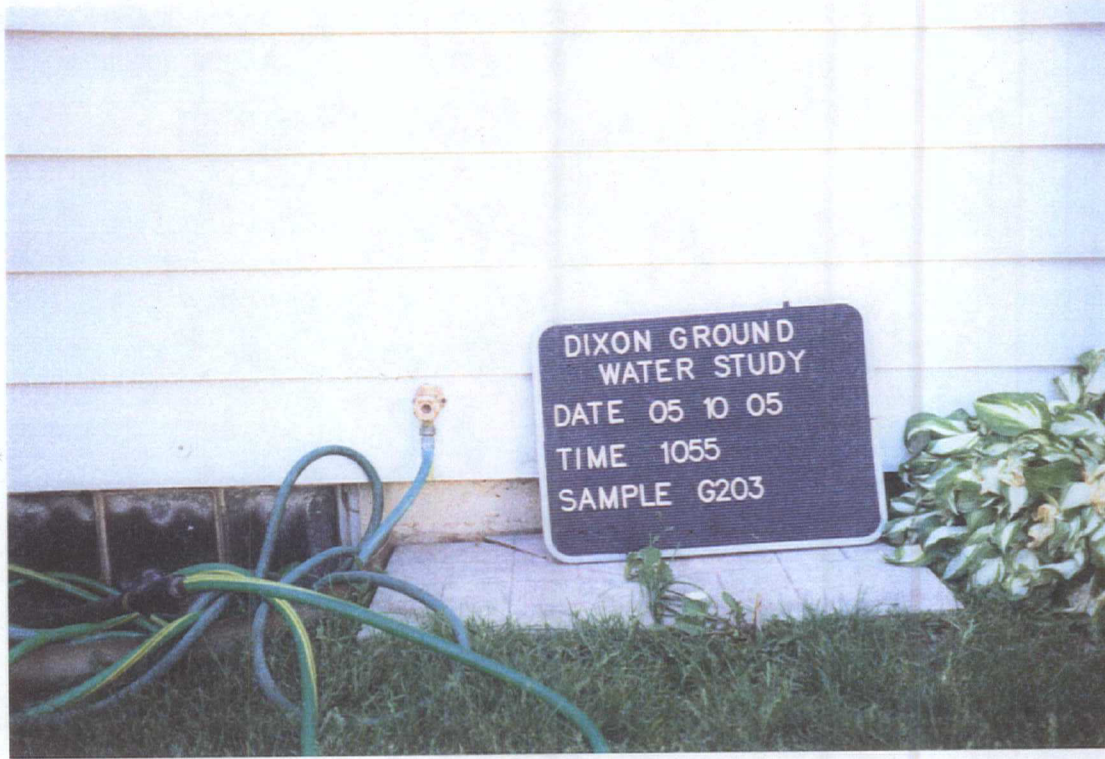
TIME: 1055

DIRECTION: Northwest

PHOTO by: Tony Wasilewski

COMMENTS:

Sample G203 was taken from a resident on [redacted]. The sample was collected from a spigot outside.



DATE: 5/10/05

TIME: 1055

DIRECTION: North west

PHOTO by: Tony Wasilewski

COMMENTS:

Sample G203 was taken from a resident on [redacted]. The sample was collected from a spigot outside.





PHOTOGRAPHS

Dixon Groundwater Study
Dixon, Illinois - Lee County

DATE: 5/10/05

TIME: 1145

DIRECTION: West

PHOTO by: Tony Wasilewski

COMMENTS:

Sample G204 and G205 were collected from a resident on [redacted] Exemption 1. Sample G205 is a duplicate of G204 and was taken from an outside spigot.



DATE: 5/10/05

TIME: 1230

DIRECTION: West

PHOTO by: Tony Wasilewski

COMMENTS:

Sample G206 was collected from a Resident on [redacted] Exemption 6 - Non-Residential. Sample was collected from an outside spigot.





PHOTOGRAPHS

Dixon Groundwater Study
Dixon, Illinois - Lee County

DATE: 5/10/05

TIME: 1320

DIRECTION: East

PHOTO by: Tony Wasilewski

COMMENTS:

Sample G207 was collected from a resident on **Exemption 6 - Non-Responsive**. The sample was collected from the sink inside due to the absence of and outside water source.



DATE: 6/14/05

TIME: 0850

DIRECTION: Northwest

PHOTO by: Tony Wasilewski

COMMENTS:

Sample G208 and G209 were collected from a resident on **Exemption 6 - Non-Responsive**. Sample G209 is a duplicate of G208. Sample was collected from outside spigot.





Illinois Environmental Protection Agency
Bureau of Land

PHOTOGRAPHS

Dixon Groundwater Study
Dixon, Illinois - Lee County

DATE: 6/14/05

TIME: 0850

DIRECTION: Southeast

PHOTO by: Tony Wasilewski

COMMENTS:

Sample G208 and G209 were collected from a resident on [redacted]. Sample G209 is a duplicate of G208. Sample was collected from outside spigot.



DATE: 6/14/05

TIME: 0955

DIRECTION: North

PHOTO by: Tony Wasilewski

COMMENTS:

Sample G210 was collected from a Resident on [redacted]. Sample was collected from the wellhead located outside. A triple volume sample was collected.





PHOTOGRAPHS

Dixon Groundwater Study
Dixon, Illinois - Lee County

DATE: 6/14/05

TIME: 0955

DIRECTION: Southwest

PHOTO by: Tony Wasilewski

COMMENTS:

Sample G210 was collected from a resident on [redacted] Exemption 6 - Non-Responsible. Sample was collected from the wellhead located outside. A triple volume sample was collected.



DATE: 6/15/05

TIME: 1500

DIRECTION: North

PHOTO by: Tony Wasilewski

COMMENTS:

Sample G211 was collected from a resident on [redacted] Exemption 6 - Non-Responsible. Sample was collected from outside spigot.





PHOTOGRAPHS

Dixon Groundwater Study
Dixon, Illinois - Lee County

DATE: 5/09/05

TIME: 1010

DIRECTION: East

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X101 was collected from the Flex O Glass location and was collected from 6 feet.



DATE: 5/09/05

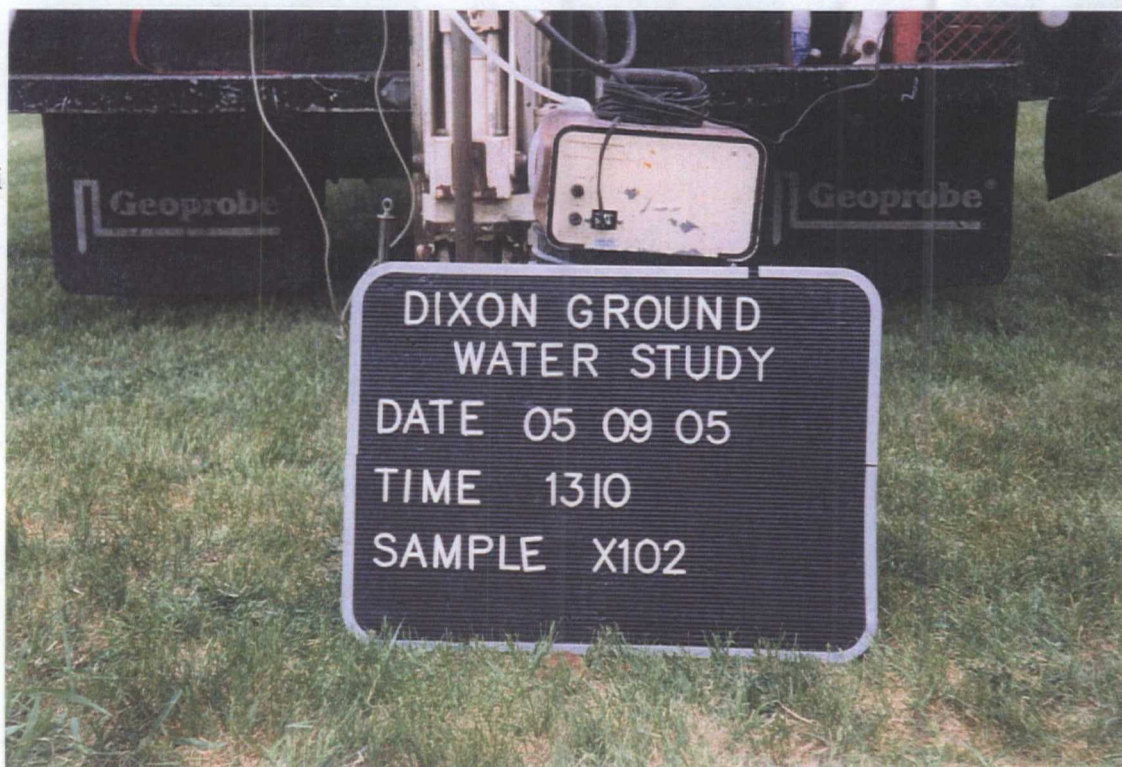
TIME: 1310

DIRECTION: West

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X102 was collected from Flex O Glass and was collected from eleven feet. The sample consisted of gray silty clay with traces of sand.





PHOTOGRAPHS

Dixon Groundwater Study
Dixon, Illinois - Lee County

DATE: 5/09/05

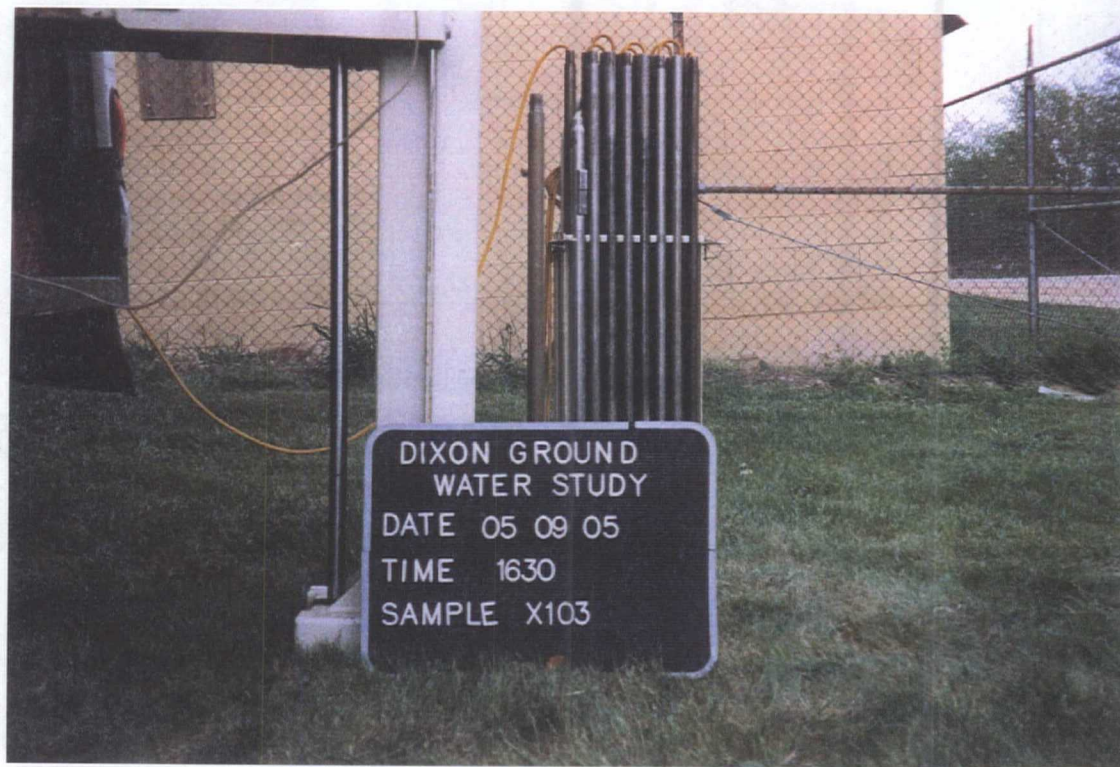
TIME: 1630

DIRECTION: North

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X103 was collected from Flex O Glass and was collected from 11.5 feet. The sample consisted of brown silty clay with sand. No reading on the PID or FID.



DATE: 5/10/05

TIME: 1120

DIRECTION: North

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X104 was collected from Eyelet Products. The sample was collected at 5 feet.





PHOTOGRAPHS

Dixon Groundwater Study
Dixon, Illinois - Lee County

DATE: 5/10/05

TIME: 1400

DIRECTION: East

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X105 and X106 were collected from Borg Warner. X105 was collected from 10 feet and consisted of brown clayey silt, very fine. Sample X106 was collected from 19 feet and consisted of very hard brown clay till.



DATE: 5/11/05

TIME: 1430

DIRECTION: West

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X107 was collected from Borg Warner. The sample was collected at 23 feet and consisted of hard brown clay.





PHOTOGRAPHS

Dixon Groundwater Study
Dixon, Illinois - Lee County

DATE: 5/11/05

TIME: 0835

DIRECTION: West

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X108 was collected from Loparex. The sample was collected at 8 feet and consisted of sandy, silty, wet clay.



DATE: 5/11/05

TIME: 0940

DIRECTION: North

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X109 was collected from Loparex. The sample was collected At 4.5 feet and consisted of brown sandy silty clay.





PHOTOGRAPHS

Dixon Groundwater Study
Dixon, Illinois - Lee County

DATE: 5/11/05

TIME: 0950

DIRECTION: North

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X110 was collected from Loparex. The sample was collected at 10.5 feet and consisted of dark brown sandy silt.



DATE: 5/11/05

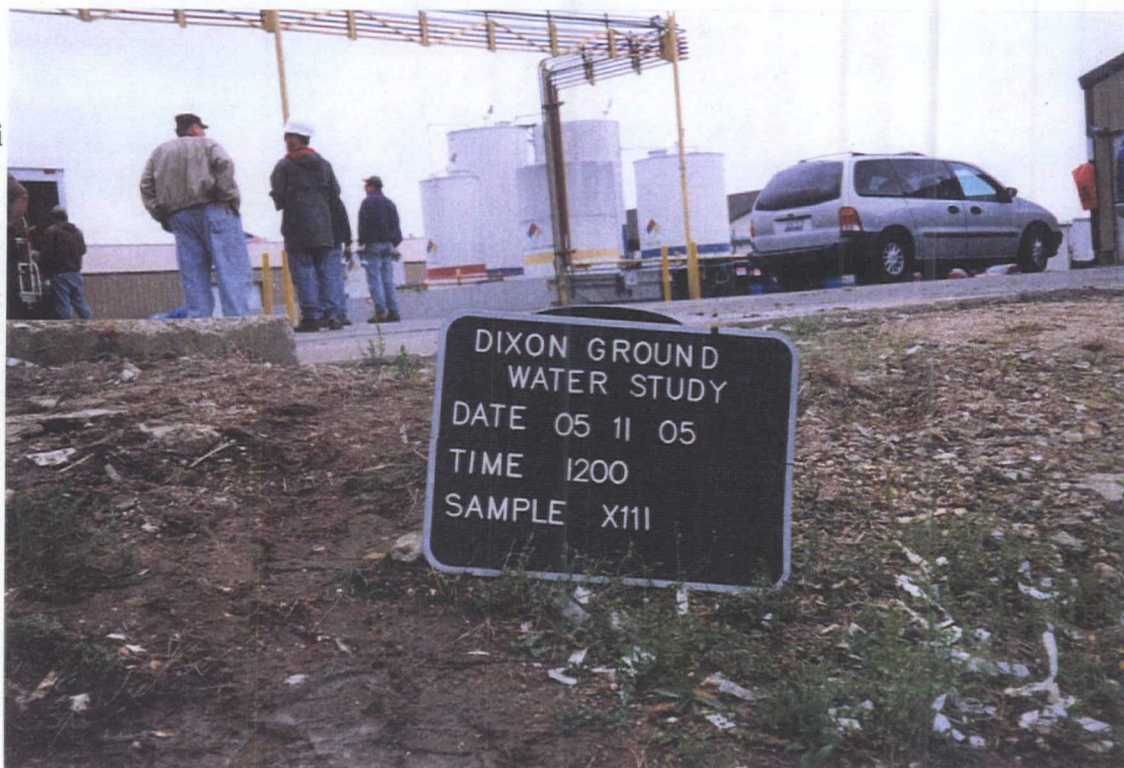
TIME: 1200

DIRECTION: Southeast

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X111 was collected from Loparex. The sample was collected from 9-10 feet and consisted of light tan to gray sandy silt.





PHOTOGRAPHS

Dixon Groundwater Study
Dixon, Illinois - Lee County

DATE: 5/11/05

TIME: 1210

DIRECTION: Northwest

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X112 was collected from Loparex. The sample was collected from 14.5-15 feet and consisted of light gray to white clay with sand.



DATE: 5/11/05

TIME: 1515

DIRECTION: Northeast

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X113 was collected from Borg Warner. The sample was collected from 18 feet and consisted of hard clay.





PHOTOGRAPHS

Dixon Groundwater Study
Dixon, Illinois - Lee County

DATE: 5/11/05

TIME: 1655

DIRECTION: South

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X114 was collected from Borg Warner. The sample was collected at 15.5 feet and consisted of hard silty clay with sand.



DATE: 5/12/05

TIME: 1220

DIRECTION: West

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X115 was collected from Anchor Coupling. The sample was collected from 19 feet and consisted of light brown sandy silty clay with cobbles.





PHOTOGRAPHS

Dixon Groundwater Study
Dixon, Illinois - Lee County

DATE: 5/12/05

TIME: 1400

DIRECTION: East

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X116 and X117 were Collected from the Hopkins building property. Sample X117 was a duplicate of X116. The samples were collected from 8 feet. The samples consisted of sandy, silty clay.



DATE: 5/12/05

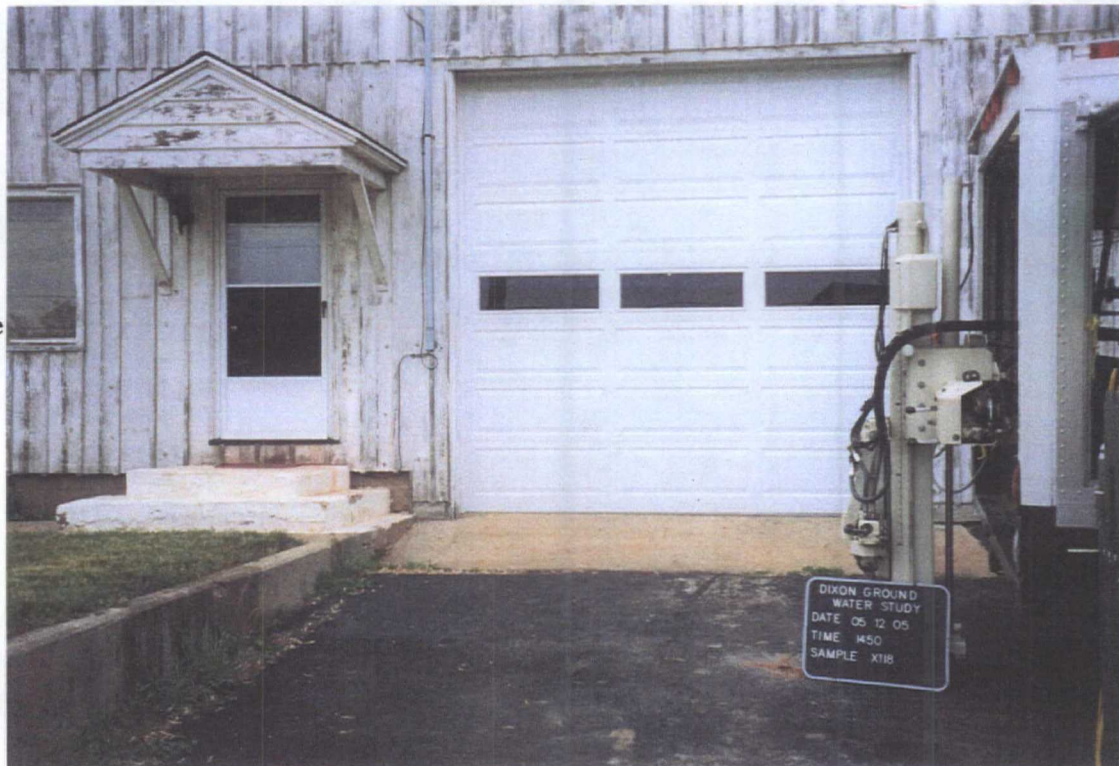
TIME: 1450

DIRECTION: North

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X118 was collected from the Hopkins building property. The samples was collected from 6.5 feet and consisted of sandy clay.





Illinois Environmental Protection Agency

Bureau of Land

PHOTOGRAPHS

Dixon Groundwater Study
Dixon, Illinois - Lee County

DATE: 6/13/05

TIME: 1430

DIRECTION: East

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X119 was collected from the Shell gas station. The sample was collected at 15 feet and consisted of silty sand with gravel.



DATE: 6/13/05

TIME: 1545

DIRECTION: West

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X120 was collected from the Shell gas station. The sample was collected at 22 feet and consisted of silty sand with clay and gravel.





PHOTOGRAPHS

Dixon Groundwater Study
Dixon, Illinois - Lee County

DATE: 6/14/05

TIME: 0930

DIRECTION: North

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X121 was collected from the Shell gas station. The sample was collected from 15 feet and consisted of silty sand with clay and gravel. A triple volume sample was collected



DATE: 6/14/05

TIME: 1045

DIRECTION: North

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X122 and X123 were collected from the Shell gas station. Sample X123 was a duplicate of X122. The sample was collected at 31 feet and consisted of hard clay with sand and gravel.





PHOTOGRAPHS

Dixon Groundwater Study
Dixon, Illinois - Lee County

DATE: 6/14/05

TIME: 1550

DIRECTION: East

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X124 was collected from the Dixon maintenance garage. The sample was collected from 11 feet and consisted of gray clay.



DATE: 6/15/05

TIME: 0940

DIRECTION: North

PHOTO by: Tony Wasilewski

COMMENTS:

Sample X125 was collected from the City Dump. The sample was collected at 11 feet and consisted of fine sand.



APPENDIX B

TARGET COMPOUND LIST

TARGET COMPOUND LIST

Volatile Target Compounds

Chloromethane	1,2-Dichloropropane
Bromomethane	cis-1,3-Dichloropropene
Vinyl Chloride	Trichloroethene
Chloroethane	Dibromochloromethane
Methylene Chloride	1,1,2-Trichloroethane
Acetone	Benzene
Carbon Disulfide	trans-1,3-Dichloropropene
1,1-Dichloroethene	Bromoform
1,1-Dichloroethane	4-Methyl-2-pentanone
1,2-Dichloroethene (total)	2-Hexanone
Chloroform	Tetrachloroethene
1,2-Dichloroethane	1,1,2,2-Tetrachloroethane
2-Butanone	Toluene
1,1,1-Trichloroethane	Chlorobenzene
Carbon Tetrachloride	Ethylbenzene
Vinyl Acetate	Styrene
Bromodichloromethane	Xylenes (total)

Base/Neutral Target Compounds

Hexachloroethane	2,4-Dinitrotoluene
bis(2-Chloroethyl) Ether	Diethylphthalate
Benzyl Alcohol	N-Nitrosodiphenylamine
bis (2-Chloroisopropyl) Ether	Hexachlorobenzene
N-Nitroso-Di-n-Propylamine	Phenanthrene
Nitrobenzene	4-Bromophenyl-phenylether
Hexachlorobutadiene	Anthracene
2-Methylnaphthalene	Di-n-Butylphthalate

1,2,4-Trichlorobenzene	Fluoranthene
Isophorone	Pyrene
Naphthalene	Butylbenzylphthalate
4-Chloroaniline	bis(2-Ethylhexyl)Phthalate
bis(2-chloroethoxy)Methane	Chrysene
Hexachlorocyclopentadiene	Benzo(a)Anthracene
2-Chloronaphthalene	3-3'-Dichlorobenzidene
2-Nitroaniline	Di-n-Octyl Phthalate
Acenaphthylene	Benzo(b)Fluoranthene
3-Nitroaniline	Benzo(k)Fluoranthene
Acenaphthene	Benzo(a)Pyrene
Dibenzofuran	Ideno(1,2,3-cd)Pyrene
Dimethyl Phthalate	Dibenz(a,h)Anthracene
2,6-Dinitrotoluene	Benzo(g,h,i)Perylene
Fluorene	1,2-Dichlorobenzene
4-Nitroaniline	1,3-Dichlorobenzene
4-Chlorophenyl-phenylether	1,4-Dichlorobenzene

Acid Target Compounds

Benzoic Acid	2,4,6-Trichlorophenol
Phenol	2,4,5-Trichlorophenol
2-Chlorophenol	4-Chloro-3-methylphenol
2-Nitrophenol	2,4-Dinitrophenol
2-Methylphenol	2-Methyl-4,6-dinitrophenol
2,4-Dimethylphenol	Pentachlorophenol
4-Methylphenol	4-Nitrophenol
2,4-Dichlorophenol	

Pesticide/PCB Target Compounds

alpha-BHC	Endrin Ketone
beta-BHC	Endosulfan Sulfate
delta-BHC	Methoxychlor
gamma-BHC (Lindane)	alpha-Chlordane
Heptachlor	gamma-Chlordane
Aldrin	Toxaphene
Heptachlor epoxide	Aroclor-1016
Endosulfan I	Aroclor-1221
4,4'-DDE	Aroclor-1232
Dieldrin	Aroclor-1242
Endrin	Aroclor-1248
4,4'-DDD	Aroclor-1254
Endosulfan II	Aroclor-1260
4,4'-DDT	

Inorganic Target Compounds

Aluminum	Manganese
Antimony	Mercury
Arsenic	Nickel
Barium	Potassium
Beryllium	Selenium
Cadmium	Silver
Calcium	Sodium
Chromium	Thallium
Cobalt	Vanadium
Copper	Zinc
Iron	Cyanide
Lead	Sulfide
Magnesium	

APPENDIX C

MCL'S FOR DRINKING WATER

**REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)**

71

Emergency Response Division
Office of Solid Waste and Emergency Response
U.S. Environmental Protection Agency
Washington, DC 20460

Table Acronyms

CAS #	Chemical Abstract Number
DWEL	Drinking Water Equivalent Level; calculated by multiplying the oral RfD by 70 kilograms (adult body weight) and dividing by the average volume of water (2 liters) consumed per day
Longer-term HA (Child)	Drinking Water Health Advisory for 10 kilogram child consuming 1 liter of water per day for up to 7 years
MCL	Maximum Contaminant Level (National Primary Drinking Water Standard)
MCLG	Maximum Contaminant Level Goal
MFL	Million Fibers per Liter
treat	MCL is based on the capability of the treatment technology
URTH-STAR	Short-term Risk Level (STAR) recommended for an Unreasonable Risk to Health (URTH) under the Safe Drinking Water Act (SWDA)

REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)

72

Chemical ORGANICS	CAS#	Cancer Risk		Standards and Health Advisories				Superfund
		Cancer Group	10 ⁻⁴ Cancer Risk (ug/L)	DWEL (ug/L)	Longer-term HA Child (ug/L)	MCL/ MCLG (ug/L)	URTH -STAR- Level (ug/L)	Removal Action Level (ug/L)
Acenaphthene	83329	-	-	2,100	-	-	-	2,100
Acetone	67641	D	-	3,500*	-	-	-	3,500
Acifluorfen (Tackle)	62476599	B2	100	400	100	-/0	-	100
Acrylamide (2-Propenamide)	79061	B2	1	7	20	treat/0	1	1
Acrylonitrile	107131	B1	6	-	-	-/0	-	6
Adipates (Diethylhexyl)	103231	C	3,000	20,000	20,000	400/400	-	4,000
Alachlor	15972608	B2	40	400	-	2/0	40	40
Aldicarb (Temik)	115063	D	-	35	-	7/7	-	35
Aldicarb sulfone	1646884	D	-	35	-	7/7	-	35
Aldicarb sulfoxide	-	D	-	35	-	7/7	-	35

**REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)**

73

Chemical ORGANICS	CAS#	Cancer Risk		Standards and Health Advisories				Superfund Removal Action Level (ug/L)
		Cancer Group	10 ⁻⁴ Cancer Risk (ug/L)	DWEL (ug/L)	Longer- term HA Child (ug/L)	MCL/ MCLG (ug/L)	URTH -STAR- Level (ug/L)	
Aldrin	309002	B2	0.2	1	0.3	-	-	0.2
Ametyrn	834128	D	-	300	900	-	-	300
Ammonium sulfamate	77730	D	-	8,000	20,000	-	-	8,000
Anthracene	120127	D	-	11,000	-	-	-	11,000
Atrazine	1912249	C	-	200	50	3/3	30	30
Baygon	114261	C	-	100	40	-	-	40
Bentazon	25057890	D	-	90	300	-	-/20	300
Benz(a)anthracene	56553	B2	-	-	-	0.1/0	-	-
Benzene	71432	A	100	-	-	5/0	100	100
Benzo(a)pyrene	50328	B2	-	-	-	0.2/0	-	0.2
Benzo(b)fluoranthene	205992	B2	-	-	-	0.2/0	-	-
Benzo(k)fluoranthene	207089	B2	-	-	-	0.2/0	-	-
bis-2-Chloroisopropyl ether	108601	D	-	1,000	4,000	-	-	1,000
Bromacil	314409	C	-	5,000	3,000	-	-	3,000
Bromochloromethane	74975	D*	-	500	1,000	-	-	50

**REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)**

Chemical ORGANICS	CAS#	Cancer Risk		Standards and Health Advisories				Superfund Removal Action Level (ug/L)
		Cancer Group	10 ⁻⁴ Cancer Risk (ug/L)	DWEL (ug/L)	Longer- term HA- Child (ug/L)	MCL/ MCLG (ug/L)	URTH -STAR- Level (ug/L)	
Bromodichloromethane	75274	B2	60	700	4,000	100/(80 ^b)/0	-	100
Bromoform	75252	B2	400	700	2,000	100/(80 ^b)/0	-	400
Bromomethane (Methyl bromide)	74839	D	-	40	100	-	-	50
Butanone (2-) (see Methyl ethyl ketone)								
Butyl benzyl phthalate	85687	C	-	6,000	-	100/0	-	7,000
Butylate	2008415	D	-	2,000	1,000	-	-	1,000
Carbaryl	63252	D	-	4,000	1,000	-	-	1,000
Carbofuran	1563662	E	-	200	50	40/40	50	50
Carbon tetrachloride	56235	B2	30	30	70	5/0	30	30
Carboxin	5234684	D	-	4,000	1,000	-	-	1,000
Chloral hydrate (Trichloroacetaldehyde monohydrate)	302170	C	-	60	200	60 ^c /40	-	60
Chloramben	133904	D	-	500	200	-	-	200

**REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)**

75

Chemical ORGANICS	CAS#	Cancer Risk		Standards and Health Advisories				Superfund Removal Action Level (ug/L)
		Cancer Group	10 ⁻⁴ Cancer Risk (ug/L)	DWEL (ug/L)	Longer- term HA Child (ug/L)	MCL/ MCLG (ug/L)	URTH- STAR- Level (ug/L)	
Chlordane	57749	B2	3	2	-	2/0	2	2
Chlorobenzene (see Monochlorobenzene)								
Chlorodibromomethane (Dibromo- chloromethane)	124481	C	-	700	2,000	100/(80 ^b)/60	-	600
Chloroform (Trichloromethane)	67663	B2	600	400	100	100/(80 ^b)/0	-	100
Chloromethane (Methyl chloride)	74873	C	-	100	400	-	-	100
Chlorophenol (2-)	95578	D	-	200	50	-	-	200
Chlorothalonil	1897456	B2	150	500	200	-	-	150
Chlorotoluene, o-	95498	D	-	700	2,000	-	-	700
Chlorotoluene, p-	106434	D	-	700	2,000	-	-	700
Chlorpyrifos	2921882	D	-	100	30	-	-	30
Chrysene	218019	B2	-	-	-	0.2/0	-	-
Cumene (see Isopropylbenzene)								
Cyanazine	21725462	C	-	70	20	-/1	-	10

**REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)**

76

Chemical ORGANICS	CAS#	Cancer Risk		Standards and Health Advisories				Superfund
		Cancer Group	10 ⁻⁶ Cancer Risk (ug/L)	DWEL (ug/L)	Long-term HA Child (ug/L)	MCL/MCLO (ug/L)	URTH-STAR-Level (ug/L)	Removal Action Level (ug/L)
2,4-D(2,4-Dichlorophenoxyacetic acid)	94757	D	-	400	100	70/70	100	100
Dacthal (DCPA)	1861321	D	-	20,000	5,000	-	-	400
Dalapon	75990	D	-	900	300	200/200	-	300
Di[2-ethylhexyl]adipate	103231	C	3,000	20,000	20,000	400/400	-	4,000
Diazinon	333415	E	-	3	5	-	-	3
Dibenzo[a,b]anthracene	53703	B2	-	-	-	0.3/0	-	-
Dibromoacetonitrile	3252435	C	-	800	2,000	-	-	800
Dibromochloromethane (see Chlorodibromomethane)								
Dibromochloropropane (DBCP)	96128	B2	3	-	-	0.2/0	3	3
Dibromomethane (Methylene bromide)	74953	D	-	-	-	-	-	-
Dibutyl phthalate (di-n-Butyl phthalate)	84742	D	-	4,000	-	-	-	4,000
Dicamba	1918009	D	-	1,000	300	-	-	300
Dichloroacetic acid	79436	B2	-	100	1,000	60/0	-	100

**REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)**

7

Chemical ORGANICS	CAS#	Cancer Risk		Standards and Health Advisories				Superfund Removal Action Level (ug/L)
		Cancer Group	10 ⁻⁴ Cancer Risk (ug/L)	DWEL (ug/L)	Longer- term HA Child (ug/L)	MCL/ MCLG (ug/L)	URTH -STAR- Level (ug/L)	
Dichloroacetonitrile	3018120	C	-	300	800	-	-	300
Dichlorobenzene -o (1,2-)	95501	D	-	3,000	9,000	600/600	3,000	3,000
Dichlorobenzene -m (1,3-)	51141	D	-	3,000	9,000	600/600	-	3,000
Dichlorobenzene -p (1,4-)	106467	C	-	4,000	10,000	75/75	750	750
Dichlorodifluoromethane (Freon-12)	75718	D	-	5,000	9,000	-	-	5,000
Dichloroethane (1,1-)	75343	C*	-	3,500*	-	-	-	-
Dichloroethane (1,2-) (Ethylene dichloride)	107062	B2	40	-	700	5/0	40	40
Dichloroethylene (1,1-)	75354	C	-	400	1,000	7/7	70	70
Dichloroethylene (cis- 1,2-)	156592	D	-	400	3,000	70/70	400	400
Dichloroethylene (trans- 1,2-)	156605	D	-	600	2,000	100/100	600	600
Dichloromethane (Methylene chloride)	75092	B2	500	2,000	-	5/0	-	500
Dichlorophenol (2,4-)	120832	D	-	100	30	-	-	30
Dichloropropane (1,2-)	78875	B2*	-	-	-	5/0	-	60

**REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)**

78

Chemical ORGANICS	CAS#	Cancer Risk		Standards and Health Advisories				Superfund
		Cancer Group	10 ⁻⁶ Cancer Risk (ug/L)	DWEL (ug/L)	Longer-term HA Child (ug/L)	MCL/ MCLG (ug/L)	URTH-STAR-Level (ug/L)	Removal Action Level (ug/L)
Dichloropropene(1,3-)(cis and trans)	542756	B2	20	10	30	-/0	-	10
Dieldrin	60571	B2	0.2	2	0.50	-	-	0.2
Diethyl phthalate	84662	D	-	30,000	-	-	-	30,000
Diethylhexyl (see Adipates)								
Diethylhexyl phthalate	117817	B2	300	700	-	6/0	-	300
Dimethrin	70382	D	-	10,000	10,000	-	-	10,000
Dimethyl methylphosphonate	756796	C	700	7,000	2,000	-	-	2,000
Dimethyl phthalate	131113	D	-	-	-	-	-	-
DIMP (Diisopropyl methyl phosphonate)	1445756	D	-	3,000	8,000	-	-	3,000
Dinitrobenzene (1,3-)	99650	D	-	5	40	-	-	5
Dinitrotoluene (2,4-)	121142	-	-	100	300	-	-	5
Dinitrotoluene (2,6-)	25321146	-	-	40	400	-	-	5
Dinitrotoluene, 1,3,4,6-(2,6-&2,4-)	-	B2	5	-	-	-	-	5
Dinoseb	88857	D	-	40	10	7/7	-	10
Dioxane D- (1,4-)	123911	B2	700	-	-	-	-	700

**REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)**

79

Chemical ORGANICS	CAS#	Cancer Risk		Standards and Health Advisories				Superfund
		Cancer Group	10 ⁻⁴ Cancer Risk (ug/L)	DWEL (ug/L)	Longer-term HA Child (ug/L)	MCL/MCLG (ug/L)	URTH-STAR-Level (ug/L)	Removal Action Level (ug/L)
Dioxin (see 2,3,7,8-TCDD)							-	
Diphenamid	957517	D	-	1,000	300	-	-	300
Diphenylamine	122394	D	-	1,000	300	-	-	300
Diquat	85007	D	-	80	-	20/20	-	80
Disulfoton	298044	E	-	1	3	-	-	1
Dithiane (1,4-)	505293	D	-	400	400	-	-	400
Diuron	330541	D	-	70	300	-	-	70
Endothall	145733	D	-	700	200	100/100	-	200
Endrin	72208	D	-	10	3	2/2	-	3
Epichlorohydrin	106898	B2	400	70	70	trace/0	70	70
Ethylbenzene	100414	D	-	3,000	1,000	700/700	1,000	1,000
Ethylene dibromide (1,2-)(EDB)	106934	B2	0.04	-	-	0.05/0	0.05	0.05
Ethylene dichloride (see 1,2-Dichloroethane)								

REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)

80

Chemical ORGANICS	CAS#	Cancer Risk		Standards and Health Advisories				Superfund
		Cancer Group	10 ⁻⁴ Cancer Risk (ug/L)	DWEL (ug/L)	Longer-term HA Child (ug/L)	MCL/ MCLG (ug/L)	URTH-STAR-Level (ug/L)	Removal Action Level (ug/L)
Ethylene glycol	107211	D	-	40,000	6,000	-	-	6,000
Ethyl ether	60297	-	-	7,000*	-	-	-	7,000
Ethylene thiourea (ETU)	96457	B2	30	3	100	-	-	3
Fenamiphos	22224926	D	-	9	5	-	-	5
Fluometuron	2164172	D	-	400	2,000	-	-	400
Fluorene	86737	D	-	1,400	-	-	-	1,400
Fluorotrichloromethane (Freon-11)	75694	D	-	10,000	3,000	-	-	3,000
Fonofos	944229	D	-	70	20	-	-	20
Formaldehyde	50000	B1	-	5,000	5,000	-	-	5,000
Freon-11 (see Fluorotrichloromethane)								
Freon-12 (see Dichlorodifluoromethane)								
Freon-113 (1,1,2-Trichloro-1,2,2,-trifluoroethane)	76131	-	-	1,100,000*	-	-	-	1,100,000
Glyphosate	1071836	E	-	4,000	1,000	700/700	-	1,000

**REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)**

81

Chemical ORGANICS	CAS#	Cancer Risk		Standards and Health Advisories				Superfund Removal Action Level (ug/L)
		Cancer Group	10 ⁻⁴ Cancer Risk (ug/L)	DWEL (ug/L)	Longer- term HA Child (ug/L)	MCL/ MCLG (ug/L)	URTH -STAR- Level (ug/L)	
Heptachlor	76448	B2	0.8	20	5	0.4/0	0.8	0.8
Heptachlor epoxide	1024573	B2	0.4	0.4	0.1	0.2/0	0.4	0.4
Hexachlorobenzene	1874	B2	2	30	50	1/0	-	2
Hexachlorobutadiene	87683	C	-	70	100	-/1	-	10
Hexachlorocyclohexane, gamma (see Lindane)								
Hexachlorocyclopentadiene	77474	D	-	200	-	50/50	-	200
Hexachloroethane	67721	C	-	40	100	-	-	40
Hexane (n-)	110543	D	-	-	4,000	-	-	4,000
Hexazinone	51235042	D	-	1,000	3,000	-	-	1,000
HMX (Octahydro-1,3,5,7-tetranitro- 1,3,5,7-tetrazocine)	2691410	D	-	2,000	5,000	-	-	2,000
Indeno[1,2,3-c,d]pyrene	193395	B2	-	-	-	0.4/0	-	-
Isophorone	78591	C	4,000	7,000	15,000	-	-	7,000

**REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)**

82

Chemical ORGANICS	CAS#	Cancer Risk		Standards and Health Advisories				Superfund
		Cancer Group	10 ⁻⁴ Cancer Risk (ug/L)	DWEL (ug/L)	Longer-term HA Child (ug/L)	MCL/ MCLG (ug/L)	URTH -STAR-Level (ug/L)	Removal Action Level (ug/L)
Isopropyl methylphosphonate	6838933	D	-	4,000	30,000	-	-	4,000
Isopropylbenzene (Cumene)	988828	-	-	1,400*	-	-	-	1,400
Kerb (see Pronamide)								
Lindane (Hexachlorocyclohexane, gamma)	58899	C	-	10	30	0.2/0.2	2	2
Malathion	121755	D	-	800	200	-	-	200
Maleic hydrazide	123331	D	-	20,000	5,000	-	-	5,000
MCPA (4-Chloro-2-methylphenoxy)- acetic acid	94746	E	-	50	100	-	-	50
Methomyl	16752775	D	-	900	300	-	-	300
Methoxychlor	72435	D	-	200	50	40/40	50	50
Methyl bromide (see Bromomethane)								
Methyl chloride (see Chloromethane)								
Methyl ethyl ketone (2-Butanone)	78933	D*	-	21,000*	-	-	-	21,000
Methyl parathion	298000	D	-	9	30	-	-	9

REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)

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Chemical ORGANICS	CAS#	Cancer Risk		Standards and Health Advisories				Superfund Removal Action Level (ug/L)
		Cancer Group	10 ⁻⁴ Cancer Risk (ug/L)	DWEL (ug/L)	Longer- term HA Child (ug/L)	MCL/ MCLG (ug/L)	URTH STAR- Level (ug/L)	
Methyl tert butyl ether	1634044	D	-	200	500	-	-	1,000
Methylene bromide (see Dibromomethane)								
Methylene chloride (see Dichloromethane)								
Metolachlor	51218452	C	-	3,500	1,000	-	-	2,000
Metribuzin	21087649	D	-	900	300	-	-	300
Monochloroacetic acid (Chloroacetic acid)	79118	-	-	70*	-	-	-	70
Monochlorobenzene (Chlorobenzene)	108907	D	-	700	2,000	100/100	700	700
Naphthalene	91203	D	-	100	400	-	-	100
Nitroguanidine	556887	D	-	4,000	10,000	-	-	4,000
Nitrophenols p-	25154556	D	-	300	800	-	-	300
Octachlorocamphene (see Toxaphene)								
Oxyamyl	23135220	E	-	900	200	200/200	-	200
Paraquat	1910425	E	-	200	50	-	-	50
Pentachloronitrobenzene (PCNB)	82688	C*	-	100*	-	-	-	20
Pentachlorophenol	87865	B2	30	1,000	300	1/0	30	30

**REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)**

84

Chemical ORGANICS	CAS#	Cancer Risk		Standards and Health Advisories				Superfund
		Cancer Group	10 ⁻⁶ Cancer Risk (ug/L)	DWEL (ug/L)	Longer-term HA Child (ug/L)	MCL / MCLG (ug/L)	URTH-STAR-Level (ug/L)	Removal Action Level (ug/L)
Perchloroethylene (see Tetrachloroethylene)								
Phenol	108952	D	-	20,000	6,000	-	-	6,000
Picloram	1918021	D	-	2,000	700	500/500	-	700
Polychlorinated biphenyls (PCBs)	1336363	B2	0.5	-	-	0.5/0	0.5	0.5
Prometon	1610180	D	-	500	200	-	-	200
Pronamide (Kerb)	23950585	C	-	3,000	800	-	-	800
Propachlor	1918167	D	-	500	100	-	-	100
Propazine	139402	C	-	700	500	-	-	500
Propham	122429	D	-	600	5,000	-	-	600
Pyrene	129000	D	-	1,100	-	-	-	1,100
RDX (Hexahydro-1,3,5-trinitro-1,3,5-triazine)	121824	C	30	100	100	-	-	100
Simazine	122349	C	-	200	70	4/4	-	40

**REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)**

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Chemical ORGANICS	CAS#	Cancer Risk		Standards and Health Advisories				Superfund Removal Action Level (ug/L)
		Cancer Group	10 ⁻⁴ Cancer Risk (ug/L)	DWEL (ug/L)	Longer- term HA Child (ug/L)	MCL/ MCLG (ug/L)	URTH AR- Level (ug/L)	
Styrene	100425	C	-	7,000	2,000	100/100	1,000	1,000
T (2,4,5-)	93765	D	-	350	800	-	-	350
Tackle (see Acifluorfen)		-						
TCDD (2,3,7,8-) (v) (Dioxin)	746016	B2	0.00002	0.00004	0.00001	0.00003/0	-	0.00003
Tebuthiuron	34014181	D	-	2,000	700	-	-	700
Temik (see Aldicarb)								
Terbacil	5902512	E	-	400	300	-	-	300
Terbufos	13071799	D	-	5	1	-	-	1
Tetrachloroethane (1,1,1,2-)	630206	C	100	1,000	900	-	-	900
Tetrachloroethane (1,1,2,2-)	79345	C*	20*	-	-	-	-	20
Tetrachloroethylene (Perchloro-ethylene)	127184	B2*	70	500	1,000	5/0	70	70
Toluene	108883	D	-	7,000	2,000	1,000/1,000	-	2,000
Toxaphene (Octachlorocamphene)	8001352	B2	3	3	-	3/0	3	3

REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)

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Chemical ORGANICS	CAS#	Cancer Risk		Standards and Health Advisories				Superfund Removal Action Level (ug/L)
		Cancer Group	10 ⁻⁴ Cancer Risk (ug/L)	DWEL (ug/L)	Longer- term HA Child (ug/L)	MCL/ MCLG (ug/L)	URTH -STAR- Level (ug/L)	
TP (2,4,5-) (2(2,4,5-trichloro- phenoxypropionic acid))	93721	D	-	300	70	50/50	70	70
Trichloroacetaldehyde (Chloral) (see Chloral hydrate)(hydrated form of trichloroacetaldehyde)								
Trichloroacetic acid	76039	C	-	4,000	4,000	60/300	-	3,000
Trichlorobenzene (1,2,4-)	120821	D	-	400	100	70/70	-	100
Trichlorobenzene (1,3,5-)	108703	D	-	200	600	-	-	200
Trichloroethane (1,1,1-)	71556	D	-	1,000	40,000	200/200	1,000	1,000
Trichloroethane (1,1,2-)	79005	C	-	100	400	5/3	-	30
Trichloroethylene (Trichloroethene)	79016	B2	300	300	-	5/0	300	300
Trichloromethane (see Chloroform)								
Trichlorophenol (2,4,6-)	88062	B2	300	-	-	-	-	300
Trichlorophenoxypropionic acid (2(2,4,5-)) (see 2,4,5-TP)								
Trichloropropane (1,2,3-)	96184	B2	-	200	600	-	-	200

**REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)**

87

Chemical ORGANICS	CAS#	Cancer Risk		Standards and Health Advisories				Superfund Removal Action Level (ug/L)
		Cancer Group	10 ⁻⁴ Cancer Risk (ug/L)	DWEL (ug/L)	Longer- term HA Child (ug/L)	MCL/ MCLG (ug/L)	URTH -STAR- Level (ug/L)	
1,1,2-Trichloro-1,2,2-trifluoroethane (see Freon 113)								
Trifluralin	1582098	C	500	300	80	-	-	80
Trinitroglycerol	55630	-	-	-	5	-	-	5
Trinitrotoluene (2,4,6-)	118967	C	100	20	20	-	-	20
Vinyl chloride	75014	A	1.5	-	10	2/0	2	2
Vydate (see Oxamyl)								
Xylenes, mixed	1330207	D	-	60,000	40,000	10,000/ 10,000	40,000	40,000

* Based on data from IRIS or HEAST in the absence of a published U.S. EPA, Office of Water value

* Total for all trihalomethanes combined cannot exceed 80 ug/L

* Total for all haloacetic acids cannot exceed 60 ug/L

* Technical Guide (tg); 2,4- and 2,6-DDinitrotoluene are unlikely to occur alone

* Based on special considerations

**REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)**

88

Chemical INORGANICS	CAS#	Standards and Health Advisories						Superfund Removal Action Level (ug/L)
		Cancer Group	10 ⁻⁴ Cancer Risk (ug/L)	DWEL (ug/L)	Longer- term HA (Child) (ug/L)	MCL/MCLG (ug/L)	URTH -STAR- Level (ug/L)	
Ammonia	7664417	D	-	-	-	-	-	34,000 ^a (taste)
Antimony	7440360	D	-	10	10	6/6	-	10
Arsenic	7440382	A	2	-	-	50/-	-	50
Asbestos Fibers > 10 um	1332214	A	700 MFL	-	-	7MFL/7MFL	70MFL	70MFL ^b
Barium	7440393	D	-	2,000	-	2,000/2,000	-	2,000
Beryllium	7440417	B2	0.8	200	4,000	4/4	-	4
Boron	7440428	D	-	3,000	900	-	-	900
Bromate	15541454	-	-	-	-	10/0	-	10
Cadmium	7440439	D	-	20	5	5/5	5	5
Chloramines (measured free chlorine)	10599903	D ^a	-	3,300	1,000	4,000/4,000	-	4,000
Chlorine	7782505	D	-	3,500	-	4,000/4,000	-	4,000

**REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)**

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Chemical INORGANICS	CAS#	Standards and Health Advisories						Superfund Removal Action Level (ug/L)
		Cancer Group	10 ⁻⁴ Cancer Risk (ug/L)	DWEL (ug/L)	Longer- term HA (Child) (ug/L)	MCL/MCLG (ug/L)	URTH -STAR- Level (ug/L)	
Chlorine dioxide	10049044	D	-	350	-	800/300	-	800
Chlorite	77558100	D	-	100	-	1,000/80	-	1,000
Chromium III (see Chromium, total)	16065831							
Chromium VI (see Chromium, total)	18540299							
Chromium, total	-	D	-	200	200	100/100	200	200
Copper	7440508	D	-	-	-	treat/1,300	1,300	1,300
Cyanide	57125	D	-	800	200	200/200	-	200
Fluoride	16984488	-	-	4,200	-	4,000/4,000	5,000*	5,000
Hypochlorite	7681529	-	-	-	-	-/4,000	-	-
Hypochlorous acid	7790923	-	-	-	-	1/4,000	-	-
Lead at tap	7439921	B2	-	-	-	treat/0	30*	30
Manganese	7439965	D*	-	200	-	-/-	-	-

**REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)**

Chemical INORGANICS	CAS#	Standards and Health Advisories						Superfund Removal Action Level (ug/L)
		Cancer Group	10 ⁴ Cancer Risk (ug/L)	DWEL (ug/L)	Longer- term HA (Child) (ug/L)	MCL/MCLG (ug/L)	URTH- STAR- Level (ug/L)	
Mercury	7439976	D	-	10	-	2/2	10	10
Molybdenum	7439987	D	-	200	10	-	-	10
Nickel	7440020	D	-	600	500	100/100	-	500
Nitrate	14797558	-	-	56,000	-	10,000/10,000	10,000	10,000
Nitrite	14797650	-	-	5,600	-	1,000/1,000	1,000	1,000
Nitrate + Nitrite	-	-	-	-	-	10,000/10,000	10,000	10,000
Selenium	7782492	-	-	200	-	50/50	200	200
Silver	7440224	D	-	200	200	-	-	100 ^d
Strontium	7440246	D	-	90,000	25,000	-	-	25,000
Sulfate	7757826	-	-	-	-	-	-	250,000 aesthetics
Thallium	7440280	-	-	2	7	2/0.5	-	2

**REMOVAL NUMERIC ACTION LEVELS FOR CONTAMINATED DRINKING WATER SITES
(APRIL 1997)**

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Chemical INORGANICS	CAS#	Standards and Health Advisories						Superfund Removal Action Level (ug/L)
		Cancer Group	10 ⁻⁴ Cancer Risk (ug/L)	DWEL (ug/L)	Longer- term HA (Child) (ug/L)	MCL/MCLG (ug/L)	URTH -STAR- Level (ug/L)	
Vanadium	7440622	D	-	250*	-	-	-	250
White phosphorus	772314	D	-	0.5	-	-	-	0.5
Zinc	7440666	D	-	10,000	3,000	-	-	3,000
Zinc chloride (measured as Zinc)	-	D	-	10,000	3,000	-	-	3,000

* Based on data from IRIS or HEAST in the absence of a published U.S. EPA, Office of Water value

* MFL = million fibers per liter

* Based on special considerations

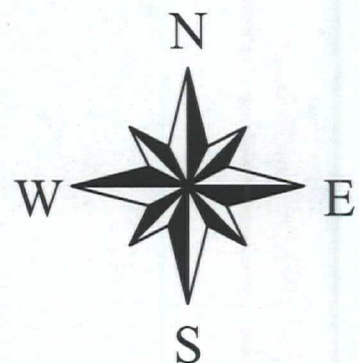
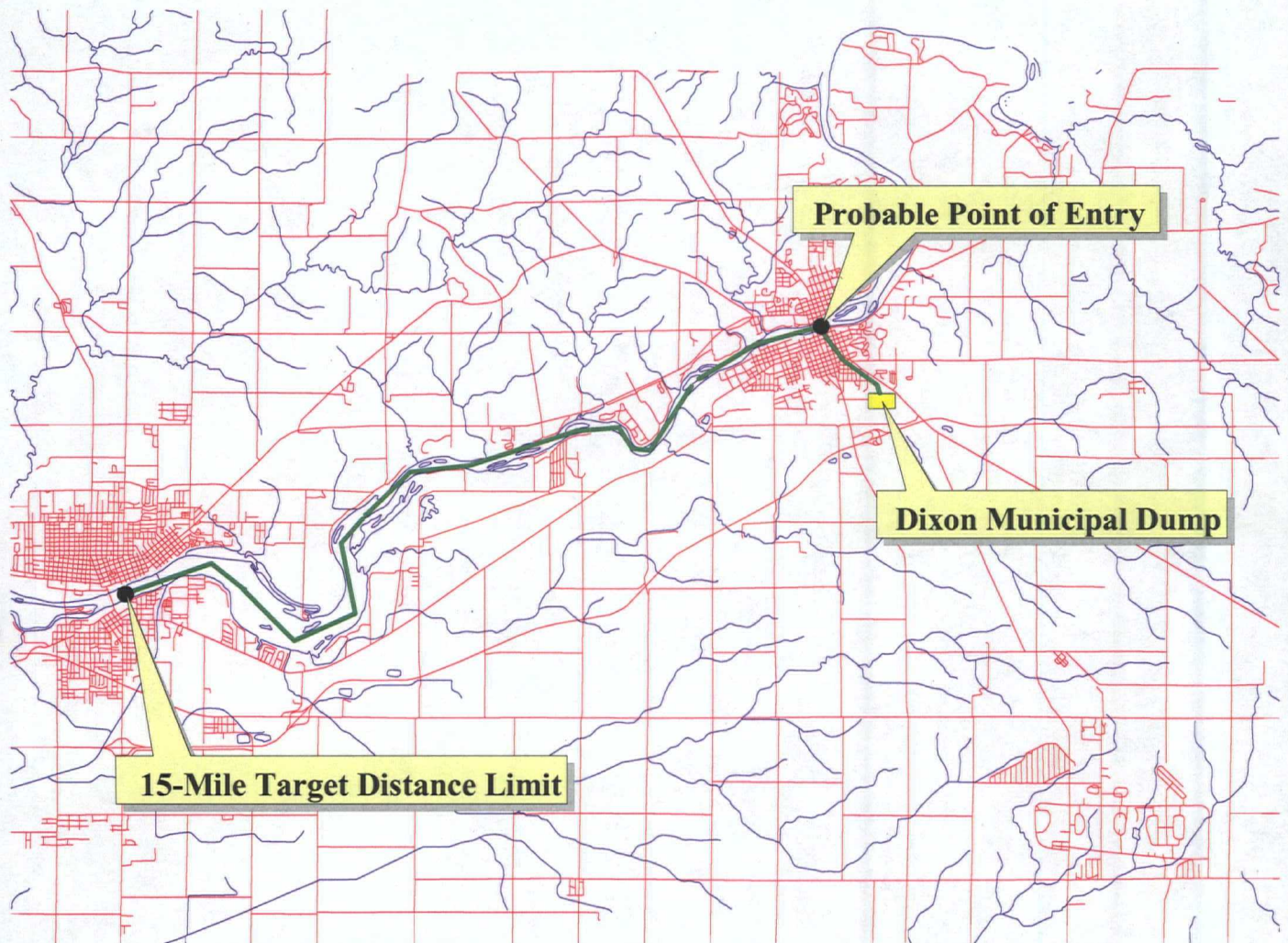
* Secondary Maximum Contamination Level intended to protect general public from argyria (a cosmetic effect) over a lifetime



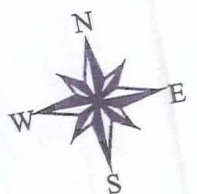
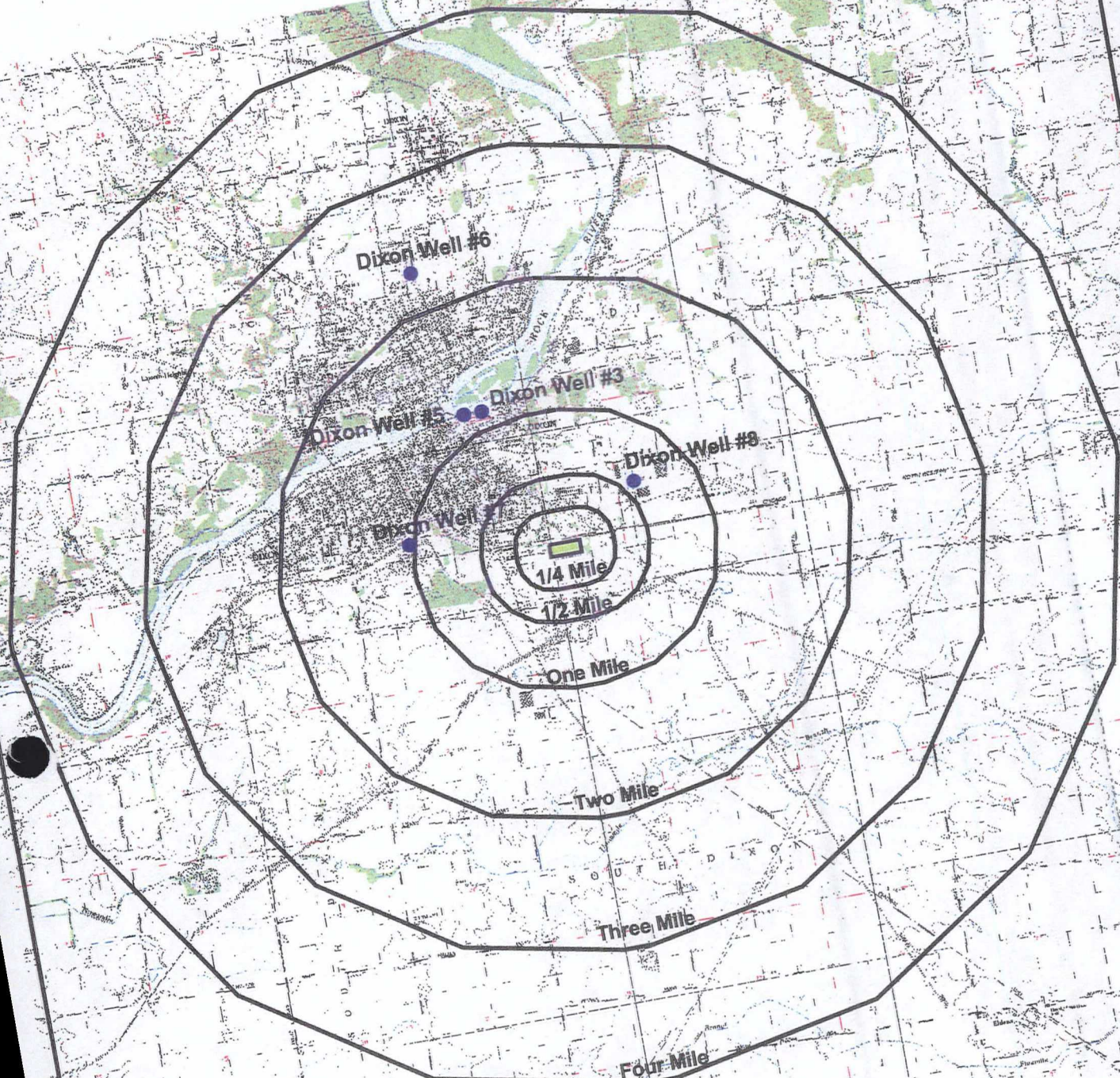
APPENDIX D

4-MILE RADIUS MAP AND SURFACE WATER PATHWAY

15-Mile Surface Water Route Map Dixon Municipal Dump



4-Mile Radius Map



3 Miles

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